United Nations A/CN.9/471

General Assembly

Distr.: General
22 February 1999

Original: English

United Nations Commission on International Trade Law
Thirty-third session
New York, 12 June-7 July 2000

Privately financed infrastructure projects: draft chapters of a legislative guide on privately financed infrastructure projects

Report of the Secretary-General

I. Introduction

1. At its twenty-ninth session, in 1996, having considered a note by the Secretariat on "build-operate-transfer" (BOT) projects (A/CN.9/424), the United Nations Commission on International Trade Law decided to prepare a legislative guide to assist States in preparing or modernizing legislation relevant to those projects.[1] The Commission requested the Secretariat to review issues suitable for treatment in such a legislative guide and to prepare draft materials for consideration by the Commission.

2. At its thirtieth session, in 1997, the Commission considered an annotated table of contents setting out the topics proposed for inclusion in the legislative guide (A/CN.9/438, annex). The Commission also considered initial drafts of chapters I, "Scope, purpose and terminology of the *Guide*", II, "Parties and phases of privately financed infrastructure projects", and V, "Preparatory measures" (A/CN.9/438/Add.1-3, respectively), of the guide. After an exchange of views on the nature of the issues to be discussed and possible methods for addressing them in the guide, the Commission generally approved the line of work proposed by the Secretariat, as contained in those documents.[2] The Commission requested the Secretariat to seek the assistance of outside experts, as required, in the preparation of future chapters and invited Governments to identify experts who could be of assistance to the Secretariat in that task.

3. At its thirty-first session, in 1998, the Commission had before it revised versions of the earlier chapters, including a revised table of contents, a draft of the introduction to the legislative guide, initial drafts of chapters I, "General legislative considerations", II, "Sector structure and regulation", III, "Selection of the concessionaire" and IV, "Conclusion and general terms of the project agreement" (A/CN.9/444/Add.1-5). The Commission considered various specific suggestions concerning the draft chapters, as well as proposals for changing

the structure of the legislative guide and reducing the number of chapters.[3] The Commission requested the Secretariat to continue the preparation of future chapters, with the assistance of outside experts, for submission to the Commission at its thirty-second session.

4. At its thirty-second session, in 1999, the Commission considered a complete draft of the legislative guide, which consisted of the following: "Introduction and background information on privately financed infrastructure projects", and chapters I, "General legislative considerations", II, "Project risks and government support", III, "Selection of the concessionaire", IV, "The project agreement", V, "Infrastructure development and operation", VI, "End of project term, extension and termination", VII, "Governing law", and VIII, "Settlement of disputes" (A/CN.9/458/Add.1-9, respectively). The Commission was informed that the Secretariat had changed the overall structure of the legislative guide and combined some of its chapters. The Commission noted and generally approved the revised structure of the draft legislative guide.[4] The Commission considered various specific suggestions concerning the draft chapters.[5]

II. Structure and contents of the draft legislative guide

5. At the Commission's thirty-second session, in 1999, it was observed that it was the first occasion on which the draft guide was available in its entirety. While it was generally felt that the draft chapters covered most of the central issues pertaining to privately financed infrastructure projects, the view was expressed that the document was rather lengthy and that adjustments were necessary in order to make the guide more accessible to the intended readers.[6] Therefore, while revising the draft chapters so as to reflect suggestions made at the thirty-second session of the Commission, the Secretariat has endeavoured to make the notes as concise as possible, taking into account the broad scope of the guide and the wide variety of issues raised by privately financed infrastructure projects.

Introduction and background information on privately financed infrastructure projects

6. An earlier draft of the introduction was contained in document A/CN.9/458/Add.1. A revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[7] is contained in an addendum to the present document (A/CN.9/471/Add.1).

Chapter I. General legislative and institutional framework

7. An earlier draft of chapter I was contained in document A/CN.9/458/Add.2. A revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[8] is contained in an addendum to the present document (A/CN.9/471/Add.2).

Chapter II. Project risks and government support

8. An initial draft of chapter II was contained in document A/CN.9/458/Add.3. A revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[9] is contained in an addendum to the present document (A/CN.9/471/Add.3).

Chapter III. Selection of the concessionaire

9. An earlier version of this chapter was contained in document A/CN.9/458/Add.4. A revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[10] is contained in an addendum to the present document (A/CN.9/471/Add.4).

Chapter IV. Construction and operation of infrastructure

10. The draft chapter combines issues previously proposed for discussion in two separate chapters, namely, chapters IV, "The project agreement" (contained in A/CN.9/458/Add.5), and V, "Infrastructure development and operation" (also contained in A/CN.9/458/Add.6). A consolidated revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[11] is contained in an addendum to the present document (A/CN.9/471/Add.5).

Chapter V. Duration, extension and termination of the project agreement

11. An earlier version of this chapter (previously numbered chapter VI) was contained in document A/CN.9/458/Add.7. A revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[12] is contained in an addendum to the present document (A/CN.9/471/Add.6).

Chapter VI. Settlement of disputes

12. An earlier version of this chapter (previously numbered chapter VIII) was contained in document A/CN.9/458/Add.9. A revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[13] is contained in an addendum to the present document (A/CN.9/471/Add.7).

Chapter VII. Other relevant areas of law

13. An earlier version of this chapter was contained in document A/CN.9/458/Add.8. A revised draft, which takes into account suggestions made at the thirty-second session of the Commission,[14] is contained in an addendum to the present document (A/CN.9/471/Add.8).

Consolidated legislative recommendations

14. At the thirty-second session of the Commission it was agreed that the legislative recommendations contained in each chapter needed to be reformulated for greater uniformity.[15] With the assistance of experts, the Secretariat has since reviewed the recommendations in their entirety, so as to ensure their coherence and consistency with one another. In order to facilitate the Commission's deliberations, all recommendations contained in the individual chapters have been consolidated into an addendum to the present document (A/CN.9/471/Add.9). The Commission may wish to consider the desirability of including such a consolidation of the recommendations in the final presentation of the guide for the users' ease of reference.

III. Conclusion

15. The Commission may wish to consider that, given the advanced stage of preparation of the draft legislative guide, two days of its upcoming session would be sufficient for a final review of the legislative recommendations and adoption of the guide.

Notes

[1] *Official Records of the General Assembly, Fifty-first Session, Supplement No. 17* (A/51/17), paras. 225-230.

[2] Ibid., *Fifty-second Session, Supplement No. 17* (A/52/17), paras. 231-247.

[3] Ibid., *Fifty-third Session, Supplement No. 17* (A/53/17), paras. 12-206.

[4] Ibid., *Fifty-fourth Session, Supplement No. 17* (A/54/17), para. 18.

[5] Ibid., paras. 17-307.

[6] Ibid., para. 18.

[7] Ibid., paras. 22-38.

[8] Ibid., paras. 39-69.

[9] Ibid., paras. 70-96.

[10] Ibid., paras. 97-136.

[11] Ibid., paras. 137-205.

[12] Ibid., paras. 206-253.

[13] Ibid., paras. 287-307.

[14] Ibid., paras. 254-282.

[15] Ibid., para. 21.

United Nations A/CN.9/471/Add.1

General Assembly

Distr.: General
6 December 1999

Original: English

United Nations Commission on International Trade Law
Thirty-third session
New York, 12 June-7 July 2000

Privately financed infrastructure projects: draft chapters of a legislative guide on privately financed infrastructure projects

Report of the Secretary-General

Addendum

Introduction and background information on privately financed infrastructure projects*

Contents

		Paragraphs	Page
A.	Introduction	1-20	2
1.	Organization and scope of the *Guide*	5-8	3
2.	Terminology used in the *Guide*	9-20	3
B.	Background information on privately financed infrastructure projects	21-77	6
1.	Private investment and infrastructure policy	23-29	6
2.	Restructuring of infrastructure sectors	30-46	8
3.	Forms of private sector participation in infrastructure projects	47-53	12
4.	Financing structures and sources of finance for infrastructure	54-67	13

* Section B of the present chapter is conceived as general background information on matters that are examined from a legislative perspective in the subsequent chapters of the *Guide*. For additional information, the reader is particularly advised to consult publications by other international organizations, such as the *Guidelines for Infrastructure Development through Build-Operate-Transfer (BOT) Projects*, prepared by the United Nations Industrial Development Organization (UNIDO Publication, Sales No. UNIDO.95.6.E), the *World Development Report 1994: Infrastructure for Development* (New York, Oxford University Press, 1994) and the *World Development Report 1996: From Plan to Market* (New York, Oxford University Press, 1996), both published by the World Bank, or *Financing Private Infrastructure* (Washington, D.C., 1996), published by the International Finance Corporation.

V.99-90389 (E)

5. Main parties involved in implementing infrastructure projects 68-77 16

A. Introduction

1. The roles of the public and the private sectors in the development of infrastructure have evolved considerably in history. Public services such as gas street lighting, power distribution, telegraphy and telephony, steam railways and electrical tramways were launched in the nineteenth century and in many countries they were provided by private companies that had obtained a licence or concession from the Government. Numerous privately funded road or canal projects were carried out at that time and there was a rapid development of international project financing, including international bond offerings to finance railways or other major infrastructure.

2. However, during most of the twentieth century the international trend was, in turn, towards public provision of infrastructure and other services. Infrastructure operators were often nationalized and competition was reduced by mergers and acquisitions. The degree of openness of the world economy also receded during this period. Infrastructure sectors remained privately operated only in a relatively small number of countries, often with little or no competition. In many countries the pre-eminence of the public sector in infrastructure service provision became enshrined in the constitution.

3. The current reverse trend towards private sector participation and competition in infrastructure sectors started in the early 1980s and has been driven by general as well as country-specific factors. Among the general factors are significant technological innovations; high indebtedness and stringent budget constraints limiting the public sector's ability to meet increasing infrastructure needs; the expansion of international and local capital markets, with a consequent improvement in access to private funding; and an increasing number of successful international experiences with private participation and competition in infrastructure. In many countries, new legislation was adopted, not only to govern such transactions, but also to modify the market structure and the rules of competition governing the sectors in which they were taking place.

4. The purpose of the present *Guide* is to assist in the establishment of a legal framework favourable to private investment in public infrastructure. The advice provided in the *Guide* aims at achieving a balance between the desire to facilitate and encourage private participation in infrastructure projects, on the one hand, and various public interest concerns of the host country, on the other. The *Guide* discusses a number of concerns of fundamental public interest, which, despite numerous differences of policy and legislative treatment, are recognized in most legal systems. Points of public concern include matters such as continuity in the provision of public services; adherence to environmental protection, health, safety and quality standards set by the host country; fairness of prices charged to the public; non-discriminatory treatment of customers or users, full disclosure of information pertaining to the operation of infrastructure facilities and the flexibility needed to meet changed conditions, including expansion of the service to meet additional demand. Fundamental concerns of the private sector, in turn, usually include issues such as stability of the legal and economic environment in the host country; transparency of laws and regulations and predictability and impartiality in their application; enforceability of property rights against violations by third parties; assurances that private property is respected by the host country and not interfered with other than for reasons of public interest and only if compensation is paid; and freedom of the parties to agree on commercial terms that ensure a reasonable return on invested capital commensurate with the risks taken by private investors. The *Guide* does not provide a single set of model

solutions to address these concerns, but it helps the reader to evaluate different approaches available and to choose the one most suitable in the national or local context.

1. Organization and scope of the Guide

5. Each chapter of the *Guide* contains a set of recommended legislative principles entitled "legislative recommendations". The legislative recommendations are intended to assist in the establishment of a legislative framework favourable to privately financed infrastructure projects. The legislative recommendations contained in the *Guide* are followed by notes offering an analytical introduction with references to financial, regulatory, legal, policy and other issues raised in the subject area. The user is advised to read the legislative recommendations together with the notes, which provide background information to enhance the understanding of the legislative recommendations.

6. The legislative recommendations deal with matters that it is important to address in legislation specifically concerned with privately financed infrastructure projects. They do not deal with other areas of law, which, as discussed in notes to the legislative recommendations, also have an impact on privately financed infrastructure projects. Moreover, the successful implementation of privately financed infrastructure projects typically requires various measures beyond the establishment of an appropriate legislative framework, such as adequate administrative structures and practices, organizational capability, technical expertise, appropriate human and financial resources and economic stability. Although some of these matters are mentioned in the notes, they are not addressed in the legislative recommendations.

7. The *Guide* is intended to be used as a reference by national authorities and legislative bodies when preparing new laws or reviewing the adequacy of existing laws and regulations. For that purpose, the *Guide* helps identify areas of law that are typically most relevant to private capital investment in public infrastructure projects and discusses the content of those laws which would be conducive to attracting private capital, national and foreign. The *Guide* is not intended to provide advice on drafting agreements for the execution of privately financed infrastructure projects. However, the *Guide* discusses some contractual issues (for instance, in chaps. IV, "Construction and operation of infrastructure" and V, "Duration, extension and termination of the project agreement") to the extent that they relate to matters that might usefully be addressed in the legislation.

8. The *Guide* pays special attention to infrastructure projects that involve an obligation, on the part of the selected investors, to undertake physical construction, repair or expansion works in exchange for the right to charge a price, either to the public or to a public authority, for the use of the infrastructure facility or for the services it generates. Although such projects are sometimes grouped with other transactions for the "privatization" of governmental functions or property, the *Guide* is not concerned with "privatization" transactions that do not relate to the development and operation of public infrastructure. In addition, the *Guide* does not address projects for the exploitation of natural resources, such as mining, oil or gas exploitation projects under some "concession", "licence" or "permission" issued by the public authorities of the host country.

2. Terminology used in the Guide

9. The following paragraphs explain the meaning and use of certain expressions that appear frequently in the *Guide*. For terms not mentioned below, such as technical terms used in financial and business management writings, the reader is advised to consult other sources of information on the subject, such as the *Guidelines for Infrastructure Development through*

Build-Operate-Transfer (BOT) Projects prepared by the United Nations Industrial Development Organization (UNIDO).[1]

(a) "Public infrastructure" and "public services"

10. As used in the *Guide*, the expression "public infrastructure" refers to physical facilities that provide services essential to the general public. Examples of public infrastructure in this sense may be found in various sectors and include various types of facility, equipment or system: power generation plants and power distribution networks (electricity sector); systems for local and long-distance telephone communications and data transmission networks (telecommunications sector); desalination plants, waste water treatment plants, water distribution facilities (water sector); facilities and equipment for waste collection and disposal (sanitation sector); and physical installations and systems used for public transportation, such as urban and inter-urban railways, underground trains, bus lines, roads, bridges, tunnels, ports, airlines and airports (transportation sector).

11. The line between "public" and "private" infrastructure must be drawn by each country as a matter of public policy. In some countries, airports are owned by the Government; in others they are privately owned but subject to regulation or to the terms of an agreement with the competent public authority. Hospital and medical facilities and prison and correctional facilities may be regarded as "public" or "private" infrastructure, depending on the country's preferences. Often, but not always, power and telecommunication facilities are regarded as "public" infrastructure. No view is expressed in the *Guide* as to where the line should be drawn in a particular country.

12. The notions of "public infrastructure" and "public services" are well established in the legal tradition of some countries, being sometimes governed by a specific body of law, which is typically referred to as "administrative law" (see chap. VII, "Other relevant areas of law", ___). However, in a number of other countries, apart from being subject to special regulations, public services are not regarded as being intrinsically distinct from other types of business. As used in the *Guide*, the expressions "public services" and "public service providers" should not be understood in a technical sense that may be attached to them under any particular legal system.

(b) "Concession", "project agreement" and related expressions

13. In many countries, public services constitute government monopolies or are otherwise subject to special regulation. Where that is the case, the provision of a public service by an entity other than a public authority typically requires an act of authorization by the appropriate governmental body. Different expressions are used to define such acts of authorization under national laws and in some legal systems various expressions may be used to denote different types of authorizations. Commonly used expressions include terms such as "concession", "franchise", "licence" or "lease" (*"affermage"*). In some legal systems, in particular those belonging to the civil law tradition, certain forms of infrastructure projects are referred to by well-defined legal concepts such as "public works concession" or "public service concession". As used in the *Guide*, the word "concession" is not to be understood in a technical sense that may be attached to it under any particular legal system or domestic law.

14. As used in the *Guide*, the term "project agreement" means an agreement between a public authority and the entity or entities selected by that public authority to carry out the project that sets forth the terms and conditions for the construction or modernization, operation and maintenance of the infrastructure. Other expressions that may be used in some legal systems

to refer to such an agreement, such as "concession agreement" or "concession contract", are not used in the *Guide*.

15. The *Guide* uses the word "concessionaire" to refer generally to an entity that carries out public infrastructure projects under a concession issued by the public authorities of the host country. The term "project company" is sometimes used in the *Guide* to refer specifically to an independent legal entity established for the purpose of carrying out a particular project.

(c) References to national authorities

16. As used in the *Guide*, the word "Government" encompasses the various public authorities of the host country entrusted with executive or policy-making functions, at the national, provincial or local level. The expression "public authorities" is used to refer, in particular, to entities of, or related to, the executive branch of the Government. The expression "legislature" is used specifically with reference to the organs that exercise legislative functions in the host country.

17. The expression "contracting authority" is generally used in the *Guide* to refer to the public authority of the host country that has the overall responsibility for the project and on behalf of which the project is awarded. Such authority may be national, provincial or local (see below, paras. 69 and 70).

18. The expression "regulatory agency" is used in the *Guide* to refer to the public authority that is entrusted with the power to issue and enforce rules and regulations governing the operation of the infrastructure. The regulatory agency may be established by statute with the specific purpose of regulating a particular infrastructure sector.

(d) "Build-operate-transfer" and related expressions

19. The various types of projects referred to in this *Guide* as privately financed infrastructure projects are sometimes divided into several categories, according to the type of private participation or the ownership of the relevant infrastructure, as indicated below:

(a) *Build-operate-transfer (BOT)*. An infrastructure project is said to be a BOT project when the contracting authority selects a concessionaire to finance and construct an infrastructure facility or system and gives the entity the right to operate it commercially for a certain period, at the end of which the facility is transferred to the contracting authority;

(b) *Build-transfer-operate (BTO)*. This expression is sometimes used to emphasize that the infrastructure facility becomes the property of the contracting authority immediately upon its completion, the concessionaire being awarded the right to operate the facility for a certain period;

(c) *Build-rent-operate-transfer (BROT)* or *"build-lease-operate-transfer" (BLOT)*. These are variations of BOT or BTO projects where, in addition to the obligations and other terms usual to BOT projects, the concessionaire rents the physical assets on which the facility is located for the duration of the agreement;

(d) *Build-own-operate-transfer (BOOT)*. These are projects in which a concessionaire is engaged for the financing, construction, operation and maintenance of a given infrastructure facility in exchange for the right to collect fees and other charges from its users. Under this arrangement the private entity owns the facility and its assets until it is transferred to the contracting authority;

(e) *Build-own-operate (BOO)*. This expression refers to projects where the concessionaire owns the facility permanently and is not under an obligation to transfer it back to the contracting authority.

20. Besides acronyms used to highlight the particular ownership regime, other acronyms may be used to emphasize one or more of the obligations of the concessionaire. In some projects, existing infrastructure facilities are turned over to private entities to be modernized or refurbished, operated and maintained, permanently or for a given period of time. Depending on whether the private sector will own such an infrastructure facility, those arrangements may be called either "refurbish-operate-transfer" (ROT) or "modernize-operate-transfer" (MOT), in the first case, or "refurbish-own-operate" (ROO) or "modernize-own-operate" (MOO), in the latter. The expression "design-build-finance-operate" (DBFO) is sometimes used to emphasize the concessionaire's additional responsibility for designing the facility and financing its construction.

B. Background information on privately financed infrastructure projects

21. In most of the countries that have recently built new infrastructure through private investment, privately financed infrastructure projects are an important tool in meeting national infrastructure needs. Essential elements of national policies include the level of competition sought for each infrastructure sector, the way in which the sector is structured and the mechanisms used to ensure adequate functioning of infrastructure markets. National policies to promote private investment in infrastructure are often accompanied by measures destined to introduce competition between public service providers or to prevent abuse of monopolistic conditions where competition is not feasible.

22. In devising programmes to promote private sector investment in the development and operation of public infrastructure, a number of countries have found it useful to review the assumptions under which public sector monopolies were established, including the historical circumstances and political conditions that had led to their creation, with a view to (a) identifying those activities which still maintain the characteristics of natural monopoly; and (b) assessing the feasibility and desirability of introducing competition in certain infrastructure sectors.

1. Private investment and infrastructure policy

23. The measures that may be required to implement a governmental policy to promote competition in various infrastructure sectors will depend essentially on the prevailing market structure. The main elements that characterize a particular market structure include barriers to the entry of competitors of an economic, legal, technical or other nature, the degree of vertical or horizontal integration, the number of companies operating in the market as well as the availability of substitute products or services.

(a) Competition policy and monopolies

24. The term monopoly in the strict sense refers to a market with only one supplier. However, pure monopoly and perfect competition mark two ends of a spectrum. Most markets for commodities or services are characterized by a degree of competition that lies between those two ends. Generally, monopolies can be classified as natural monopolies, legal monopolies and de facto monopolies; each of them may require different policy approaches:

(a) *Natural monopolies*. These are economic activities that allow a single provider to supply the whole market at a lower cost than two or more providers. This situation is typical for economic activities that entail large investment and high fixed costs, but decreasing costs of producing an additional unit of services (e.g. an additional cubic metre of water) to attend an increase of demand. Natural monopolies tend to exhibit large upfront fixed investment requirements that make it difficult for a new company, lacking comparable economies of scale, to enter the market and undercut the incumbent;

(b) *Legal monopolies*. Legal monopolies are established by law and may cover sectors or activities that are or are not natural monopolies. In the latter category, monopolies exist solely because competition is prohibited. The developments that had led many countries to the establishment of legal monopolies were often based on the consideration that national infrastructure needs, both in terms of quality and quantity, could not be adequately met by leaving infrastructure to the free market;

(c) *De facto monopolies*. These monopolies may not necessarily be the result of economic fundamentals or of legal provisions, but simply of the absence of competition, resulting, for example, from the integrated nature of the infrastructure company and its ability to control essential facilities to the exclusion of other suppliers.

25. Although monopolies are sometimes justified by legal, political or social grounds, they may produce negative economic effects. A service provider operating under monopolistic conditions is typically able to fix prices above those which would be charged in competitive conditions. The surplus profit that results from insufficient competition implies a transfer of wealth fromconsumers to producers. Monopolies have also been found to cause a net loss of welfare to the economy as a result of inflated prices generated by artificially low production; a reduced rate of innovation; and insufficient efforts to reduce production costs. Furthermore, in particular in infrastructure sectors, there may be secondary effects on other markets. (For example, lack of competition and efficiency in telecommunications has negative repercussions through increases in cost for the economy at large.)

26. Despite their negative economic effects, monopolies and other regulatory barriers to competition have sometimes been maintained in the absence of natural monopoly conditions. One of the reasons cited for retaining monopolies is that they may be used to foster certain policy objectives, such as ensuring the provision of services in certain regions or to certain categories of consumers at low prices or even below cost. Examples of services for which the price may not cover costs include lifeline telephone, water or power service, discounted transport for certain categories of travellers (e.g. school children or senior citizens), as well as other services for low-income or rural users. A monopolistic service provider is able to finance the provision of such services through internal "cross-subsidies" from other profitable services provided in other regions or to other categories of consumers.

27. Another reason sometimes cited for retaining legal monopolies in the absence of natural monopoly conditions is to make the sector more attractive to private investors. Private operators may insist on being granted exclusivity rights to provide a certain service so as to reduce the commercial risk of their investment. However, that objective has to be balanced against the interests of consumers and the economy as a whole. For those countries where the granting of exclusivity rights is found to be needed as an incentive to private investment, it may be advisable to consider restricting competition, though on a temporary basis only (see chap. I, "General legislative and institutional framework", paras. 20-22).

(b) Scope for competition in different sectors

28. Until recently, monopolistic conditions prevailed in most infrastructure sectors either because the sector was a natural monopoly or because regulatory barriers or other factors (e.g. vertically integrated structure of public service providers) prevented effective competition. However, rapid technological progress has broadened the potential scope for competition in infrastructure sectors, as discussed briefly below:

(a) *Telecommunication sector.* New wireless technology not only makes mobile telecommunication services possible, but it is also increasingly competing with fixed (wireline) services. Fibre optic networks, cable television networks, data transmission over power lines, global satellite systems, increasing computing power, improved data compression techniques, convergence between communications, broadcasting and data processing are further contributing to the breakdown of traditional monopolies and modes of service provision. As a result of these and other changes, telecommunication services have become competitive and countries are increasingly opening up the sector to free entry, while limiting access only to services that require the use of scarce public resources, such as radio frequency;

(b) *Energy sector.* In the energy sector, combined-cycle gas turbines and other technologies allowing for efficient power production on smaller scales and standardization in manufacturing of power generation equipment have led several countries to change the monopolistic and vertically integrated structure of domestic electricity markets. Increasing computing power and improved data-processing software make it easier to dispatch electricity across a grid and to organize power pools and other mechanisms to access the network and trade in electricity;

(c) *Transport sector.* Technology is in many cases also at the origin of changing patterns in the transport sector: the introduction of containers and other innovations, such as satellite communications, making it possible to track shipments across the globe, have had profound consequences on shipping, port management and rail and truck transport, while fostering the development of intermodal transport.

29. Technological changes such as these have prompted the legislatures in a number of countries to extend competition to infrastructure sectors by adopting legislation that abolishes monopolies and other barriers to entry, changes the way infrastructure sectors are organized and establishes a regulatory framework fostering effective competition. The extent to which this can be done depends on the sector, the size of the market and other factors.

2. Restructuring of infrastructure sectors

30. In many countries, private participation in infrastructure development has followed the introduction of measures to restructure infrastructure sectors. Legislative action typically begins with the abolition of rules that prohibit private participation in infrastructure and the removal of all other legal impediments to competition that cannot be justified by reasons of public interest. It should be noted, however, that the extent to which a particular sector may be opened to competition is a decision that is taken in the light of the country's overall economic policy. Some countries, in particular developing countries, might have a legitimate interest in promoting the development of certain sectors of local industry and might thus choose not to open certain infrastructure sectors to competition.

31. For monopolistic situations resulting from legal prohibitions rather than economic and technological fundamentals, the main legislative action needed to introduce competition is the removal of the existing legal barriers. This may need to be reinforced by rules of competition (such as the prohibition of collusion, cartels, predatory pricing or other unfair trading practices) and regulatory oversight (see chap. I, "General legislative and institutional framework", paras.

30-53). For a number of activities, however, effective competition may not be obtained through the mere removal of legislative barriers without legislative measures to restructure the sector concerned. In some countries, monopolies have been temporarily maintained only for the time needed to facilitate a gradual, more orderly and socially acceptable transition from a monopolistic to a competitive market structure.

(a) Unbundling of infrastructure services

32. In the experience of some countries it has been found that vertically or horizontally integrated infrastructure companies may be able to prevent effective competition. Integrated companies may try to extend their monopolistic powers in one market or market segment to other markets or market segments in order to extract monopoly rents in those activities as well. Therefore, some countries have found it necessary to separate the monopoly element (such as the grid in many networks) from competitive elements in given infrastructure sectors. By and large, infrastructure services tend to be competitive, whereas the underlying physical infrastructure often has monopolistic characteristics.

33. The separation of competitive activities from monopolistic ones may in turn require the unbundling of vertically or horizontally integrated activities. Vertical unbundling occurs when upstream activities are separated from downstream ones, for example, by separating production, transmission, distribution and supply activities in the power sector. The objective is typically to separate key network components or essential facilities from the competitive segments of the business. Horizontal unbundling occurs when one or more parallel activities of a monopolist public service provider are divided among separate companies, which may either compete directly with each other in the market (as is increasingly the case with power production) or retain a monopoly over a smaller territory (as may be the case with power distribution). Horizontal unbundling refers both to a single activity or segment being broken up (as in the power sector examples) and to substitutes being organized separately in one or more markets (as in the case of separation of cellular services from fixed-line telephony, for example).

34. However, the costs and benefits of such changes need to be considered carefully. Costs may include the costs associated with the change itself (e.g. transaction and transition costs, including the loss incurred by companies that lose benefits or protected positions as a result of the new scheme) and those resulting from the operation of the new scheme, in particular higher coordination costs resulting, for example, from more complicated network planning, technical standardization or regulation. Benefits, on the other hand, may include new investments, better or new services, more choice and lower economic costs.

(b) Recent experience in major infrastructure sectors

(i) Telecommunications

35. Unbundling has not been too common in the telecommunication sector. In some countries, long-distance and international services were separated from local services; competition was introduced in the former, while the latter remained largely monopolistic. In some of those countries that trend is now being reversed, with local telephone companies being allowed to provide long-distance services and long-distance companies being allowed to provide local services, all in a competitive context. Mandatory open access rules are common in the telecommunication sector of those countries where the historical public service provider offers services in competition with other providers while controlling essential parts of the network.

(ii) Electricity

36. Electricity laws recently enacted in various countries call for the unbundling of the power sector by separating generation, transmission and distribution. In some cases, supply is further distinguished from distribution in order to leave only the monopolistic activity (i.e. the transport of electricity for public use over wires) under a monopoly. In those countries, the transmission and distribution companies do not buy or sell electricity but only transport it against a regulated fee. Trade in electricity occurs between producers or brokers on the one hand and users on the other. In some of the countries concerned, competition is limited to large users only or is being phased in gradually.

37. Where countries have opted for the introduction of competition in the power and gas sectors, new legislation has organized the new market structure, stipulating to what extent the market had to be unbundled (sometimes including the number of public service providers to be created out of the incumbent monopoly), or removed barriers to new entry. The same energy laws have also established specific competition rules, whether structural (e.g. prohibition of cross-ownership between companies in different segments of the market, such as production, transmission and distribution, or gas and electricity sale and distribution) or behavioural (e.g. third-party access rules, prohibition of alliances or other collusive arrangements). New institutions and regulatory mechanisms, such as power pools, dispatch mechanisms or energy regulatory agencies, have been established to make the new energy markets work. Finally, other aspects of energy law and policy have had to be amended in conjunction with these changes, including the rules governing the markets for oil, gas, coal and other energy sources.

(iii) Water and sanitation

38. The most common market structure reform introduced in the water and sanitation sector is horizontal unbundling. Some countries have created several water utilities where a single one existed before. This is particularly common in, but is not limited to, countries with separate networks that are not or only slightly interconnected. In practice, it has been found that horizontal unbundling facilitates comparison of the performance of service providers.

39. Some countries have invited private investors to provide bulk water to a utility or to build and operate water treatment or desalination plants, for example. In such vertical unbundling, the private services (and the discrete investments they require) are usually rendered under contract to a utility and do not fundamentally modify the monopolistic nature of the market structure: the plants usually do not compete with each other and are usually not allowed to bypass the utility to supply customers. A number of countries have introduced competition in bulk water

supply and transportation; in some cases, there are active water markets. Elsewhere, competition is limited to expensive bottled or trucked water and private wells.

(iv) Transport

40. In the restructuring measures taken in various countries, a distinction is made between transport infrastructure and transport services. The former may often have natural monopoly characteristics, whereas services are generally competitive. Competition in transport services should be considered not only within a single mode but also across modes, since trains, trucks, buses, airlines and ships tend to compete for passengers and freight.

41. With respect to railways, some countries have opted for a separation between the ownership and operation of infrastructure (e.g. tracks, signalling systems and train stations) on the one hand and of rail transport services (e.g. passenger and freight) on the other. In such schemes, the law does not allow the track operator also to operate transport services, which are operated by other companies often in competition with each other. Other countries have let integrated companies operate infrastructure as well as services, but have enforced third-party access rights to the infrastructure, sometimes called "trackage rights". In those cases, transport companies, whether another rail line or a transport service company, have right of access to the track on certain terms and the company controlling the track has the obligation to grant such access.

42. In many countries, ports were until recently managed as public sector monopolies. When opening the sector to private participation, legislators have considered different models. Under the landlord-port system, the port authority is responsible for the infrastructure as well as overall coordination of port activities; it does not, however, provide services to ships or merchandise. In service ports, the same entity is responsible for infrastructure and services. Competition between service providers (e.g. tugboats, stevedoring and warehousing) may be easier to establish and maintain under the landlord system.

43. Legislation governing airports may also require changes, whether to allow private investment or competition between or within airports. Links between airport operation and air traffic control may also need to be considered carefully. Within airports, many countries have introduced competition in handling services, catering and other services to planes, as well as in passenger services such as retail shops, restaurants, parking and the like. In some countries, the construction and operation of a new terminal at an existing airport has been entrusted to a new operator, thus creating competition between terminals. In others, new airports have been built on a BOT basis and existing ones transferred to private ownership.

(c) Transitional measures

44. The transition from monopoly to market needs to be carefully managed. Political, social or other factors have led some countries to pursue a gradual or phased approach to implementation. As technology and other outside forces are constantly changing, some countries have adopted sector reforms that could be accelerated or adjusted to take those changing circumstances into account.

45. Some countries have felt that competition should not be introduced at once. In such cases, legislation has provided for temporary exclusivity rights, limitation in the number of public service providers or other restrictions on competition. Those measures are designed to give the incumbent adequate time to prepare for competition and to adjust prices, while providing the public service provider adequate incentives for investment and service expansion. Other countries have included provisions calling for the periodic revision (at the

time of price reviews, for example) of such restrictions with a view to ascertaining whether the conditions that justified them at the time when they were introduced still prevail.

46. Another transitional measure, at least in some countries with government-owned public service providers, has been the restructuring or privatization of the incumbent service provider. In most countries where government-owned providers of public services have been privatized, liberalization has by and large either accompanied or preceded privatization. Some countries have proceeded otherwise and have privatized companies with significant exclusivity rights, often to increase privatization proceeds. They have, however, found it difficult and sometimes very expensive to remove, restrict or shorten at a later stage the exclusive rights or monopolies protecting private or privatized public service providers.

3. Forms of private sector participation in infrastructure projects

47. Private sector participation in infrastructure projects may be devised in a variety of different forms, ranging from publicly owned and operated infrastructure to fully privatized projects. The appropriateness of a particular variant for a given type of infrastructure is a matter to be considered by the Government in view of the national needs for infrastructure development and an assessment of the most efficient ways in which particular types of infrastructure facilities may be developed and operated. In a particular sector more than one option may be used.

(a) Public ownership and public operation

48. In cases where public ownership and control is desired, direct private financing as well as infrastructure operation under commercial principles may be achieved by establishing a separate legal entity controlled by the Government to own and operate the project. Such an entity may be managed as an independent private commercial enterprise that is subject to the same rules and business principles that apply to private companies. Some countries have a well established tradition in operating infrastructure facilities through these types of company. Opening the capital of such companies to private investment or making use of such a company's ability to issue bonds or other securities may create an opportunity for attracting private investment in infrastructure.

49. Another form of involving private participation in publicly owned and operated infrastructure may be the negotiation of "service contracts" whereby the public operator contracts out specific operation and maintenance activities to the private sector. The Government may also entrust a broad range of operation and maintenance activities to a private entity acting on behalf of the contracting authority. Under such an arrangement, which is sometimes referred to as a "management contract", the private operator's compensation may be linked to its performance, often through a profit-sharing mechanism, although compensation on the basis of a fixed fee may also be used, in particular where the parties find it difficult to establish mutually acceptable mechanisms to assess the operator's performance.

(b) Public ownership and private operation

50. Alternatively, the whole operation of public infrastructure facilities may be transferred to private entities. One possibility is to give the private entity, usually for a certain period, the right to use a given facility, to supply the relevant services and to collect the revenue generated by that activity. Such a facility may already be in existence or may have been specially built by the private entity concerned. This combination of public ownership and private operation has the essential features of arrangements that in some legal systems may be referred to as "public works concessions" or "public service concessions".

51. Another form of private participation in infrastructure is where a private entity is selected by the contracting authority to operate a facility that has been built by or on behalf of the Government, or whose construction has been financed with public funds. Under such an arrangement, the operator assumes the obligation to operate and maintain the infrastructure and is granted the right to charge for the services it provides. In such a case, the operator assumes the obligation to pay to the contracting authority a portion of the revenue generated by the infrastructure that is used by the contracting authority to amortize the construction cost. Such arrangements are referred to in some legal systems as "lease" or "*affermage*".

(c) Private ownership and operation

52. Under the third approach, the private entity not only operates the facility, but also owns the assets related to it. Here, too, there may be substantial differences in the treatment of those projects under domestic laws, for instance as to whether the contracting authority retains the right to reclaim title to the facility or to assume responsibility for its operation (see also chap. IV, "Construction and operation of infrastructure", paras. 23-29).

53. Where the facility is operated pursuant to a governmental licence, private ownership of physical assets (e.g. a telecommunication network) is often separable from the licence to provide the service to the public (e.g. long-distance telephone services), in that the licence can be withdrawn by the competent public authority under certain circumstances. Thus, private ownership of the facility may not necessarily entail an indefinite right to provide the service.

4. Financing structures and sources of finance for infrastructure

(a) Notion of project finance

54. Large-scale projects involving the construction of new infrastructure facilities are often carried out by new corporate entities specially established for that purpose by the project promoters. Such a new entity, often called a "project company", becomes the vehicle for raising funds for the project. Because the project company lacks an established credit or an established balance sheet on which the lenders can rely, the preferred financing modality for the development of new infrastructure is called "project finance". In a project finance transaction, credit will be made available to the extent that the lenders can be satisfied to look primarily to the project's cash flow and earnings as the source of funds for the repayment of loans taken out by the project company. Other guarantees either are absent or cover only certain limited risks. To that end, the project's assets and revenue, and the rights and obligations relating to the project, are independently estimated and are strictly separated from the assets of the project company's shareholders.

55. Project finance is also said to be "non-recourse" financing owing to the absence of recourse to the project company's shareholders. In practice, however, lenders are seldom ready to commit the large amounts needed for infrastructure projects solely on the basis of a project's expected cash flow or assets. The lenders may reduce their exposure by incorporating into the project documents a number of back-up or secondary security arrangements and other means of credit support provided by the project company's shareholders, the Government, purchasers or other interested third parties. This modality is commonly called "limited recourse" financing.

(b) Financing sources for infrastructure projects

56. Alternatives to traditional public financing are playing an increasing role in the development of infrastructure. In recent years, new infrastructure investment in various

countries has included projects with exclusively or predominantly private funding sources. The two main types of fund are debt finance, usually in the form of loans obtained on commercial markets, and equity investment. However, financing sources are not limited to those. Public and private investment have often been combined in arrangements sometimes called "public-private partnerships".

(i) Equity capital

57. The first type of capital for infrastructure projects is provided in the form of equity investment. Equity capital is obtained in the first place from the project promoters or other individual investors interested in taking stock in the concessionaire. However, such equity capital normally represents only a portion of the total cost of an infrastructure project. In order to obtain commercial loans or to have access to other sources of funds to meet the capital requirements of the project, the project promoters and other individual investors have to offer priority payment to the lenders and other capital providers, thus accepting that their own investment will only be paid after payment of those other capital providers. Therefore, the project promoters typically assume the highest financial risk. At the same time, they will hold the largest share in the project's profit once the initial investment is paid. Substantial equity investment by the project promoters is typically welcomed by the lenders and the Government, as it helps reduce the burden of debt service on the concessionaire's cash flow and serves as an assurance of those companies' commitment to the project.

(ii) Commercial loans

58. Debt capital often represents the main source of funding for infrastructure projects. It is obtained on the financial market primarily by means of loans extended to the project company by national or foreign commercial banks, typically using funds that originate from short- to medium-term deposits remunerated by those banks at floating interest rates. Consequently, loans extended by commercial banks are often subject to floating interest rates and normally have a maturity term shorter than the project period. However, where feasible and economic, given financial market conditions, banks may prefer to raise and lend medium- to long-term funds at fixed rates, so as to avoid exposing themselves and the concessionaire over a long period to interest rate fluctuations, while also reducing the need for hedging operations. Commercial loans are usually provided by lenders on condition that their payment takes precedence over the payment of any other of the borrower's liabilities. Therefore, commercial loans are said to be "unsubordinated" or "senior" loans.

(iii) "Subordinated" debt

59. The third type of fund typically used in these projects are "subordinated" loans, sometimes also called "mezzanine" capital. Such loans rank higher than equity capital in order of payment, but are subordinate to senior loans. This subordination may be general (i.e. ranking generally lower than any senior debt) or specific, in which case the loan agreements specifically identify the type of debt to which it is subordinated. Subordinated loans are often provided at fixed rates, usually higher than those of senior debt. As an additional tool to attract such capital, or sometimes as an alternative to higher interest rates, providers of subordinated loans may be offered the prospect of direct participation in capital gains, by means of the issue of preferred or convertible shares or debentures, sometimes providing an option to subscribe for shares of the concessionaire at preferential prices.

(iv) Institutional investors

60. In addition to subordinated loans provided by the project promoters or by public financial institutions, subordinated debt may be obtained from financing companies, investment funds, insurance companies, collective investment schemes (e.g. mutual funds), pension funds and other so-called "institutional investors". These institutions normally have large sums available for long-term investment and may represent an important source of additional capital for infrastructure projects. Their main reasons for accepting the risk of providing capital to infrastructure projects are the prospect of remuneration and interest in diversifying investment.

(v) Capital market funding

61. As more experience is gained with privately financed infrastructure projects, increased use is being made of capital market funding. Funds may be raised by the placement of preferred shares, bonds and other negotiable instruments on a recognized stock exchange. Typically, the public offer of negotiable instruments requires regulatory approval and compliance with requirements of the relevant jurisdiction, such as requirements concerning the information to be provided in the prospectus of issuance and, in some jurisdictions, the need for prior registration. Bonds and other negotiable instruments may have no other security than the general credit of the issuer or may be secured by a mortgage or other lien on specific property.

62. The possibility of gaining access to capital markets is usually greater for existing public utilities with an established commercial record than for companies specially established to build and operate a new infrastructure and lacking the required credit rating. Indeed, a number of stock exchanges require that the issuing company have some established record over a certain minimum period before being permitted to issue negotiable instruments.

(vi) Financing by Islamic financial institutions

63. One additional group of potential capital providers are Islamic financial institutions. Those institutions operate under rules and practices derived from the Islamic legal tradition. One of the most prominent features of banking activities under their rules is the absence of interest payments or strict limits to the right to charge interest and consequently the establishment of other forms of consideration for the borrowed money, such as profit-sharing or direct participation of the financial institutions in the results of the transactions of their clients. As a consequence of their operating methods, Islamic financial institutions may be more inclined than other commercial banks to consider direct or indirect equity participation in a project.

(vii) Financing by international financial institutions

64. International financial institutions may also play a significant role as providers of loans, guarantees or equity to privately financed infrastructure projects. A number of projects have been co-financed by the World Bank, the International Finance Corporation or by regional development banks.

65. International financial institutions may also play an instrumental role in the formation of "syndications" for the provision of loans to the project. Some of those institutions have special loan programmes under which they become the sole "lender of record" to a project, acting on its own behalf and on behalf of participating banks and assuming responsibility for processing disbursements by participants and for subsequent collection and distribution of loan payments received from the borrower, either pursuant to specific agreements or based on other rights that are available under their status of preferred creditor. Some international financial institutions

may also provide equity or mezzanine capital, by investing in capital market funds specialized in securities issued by infrastructure operators. Lastly, international financial institutions may provide guarantees against a variety of political risks, which may facilitate the project company's task of raising funds in the international financial market (see chap. II, "Project risks and government support", paras. 61-71).

(viii) Support by export credit and investment promotion agencies

66. Export credit and investment promotion agencies may provide support to the project in the form of loans, guarantees or a combination of both. The participation of export credit and investment promotion agencies may provide a number of advantages, such as lower interest rates than those applied by commercial banks and longer-term loans, sometimes at a fixed interest rate (see chap. II, "Project risks and government support", paras. 72-74).

(ix) Combined public and private finance

67. In addition to loans and guarantees extended by commercial banks and national or multilateral public financial institutions, in a number of cases public funds have been combined with private capital for financing new projects. Such public funds may originate from government income or sovereign borrowing. They may be combined with private funds as initial investment or as long-term payments, or may take the form of governmental grants or guarantees. Infrastructure projects may be co-sponsored by the Government through equity participation in the concessionaire, thus reducing the amount of equity and debt capital needed from private sources (see chap. II, "Project risks and government support", paras. 40 and 41).

5. Main parties involved in implementing infrastructure projects

68. The parties to a privately financed infrastructure project may vary greatly, depending on the infrastructure sector, the modality of private sector participation and the arrangements used for financing the project. The following paragraphs identify the main parties in the implementation of a typical privately financed infrastructure project involving the construction of a new infrastructure facility and carried out under the "project finance" modality.

(a) The contracting authority and other public authorities

69. The execution of a privately financed infrastructure project frequently involves a number of public authorities in the host country at the national, provincial or local level. The contracting authority is the main body responsible for the project within the Government. Furthermore, the execution of the project may necessitate the active participation (e.g. for the issuance of licences or permits) of other public authorities in addition to the contracting authority, at the same or at a different level of Government. Those authorities play a crucial role in the execution of privately financed infrastructure projects.

70. The contracting authority or another public authority normally identifies the project pursuant to its own policies for infrastructure development in the sector concerned and determines the type of private sector participation that would allow the most efficient operation of the infrastructure facility. Thereafter, the contracting authority conducts the process that leads to the selection of the concessionaire. Furthermore, throughout the life of the project, the Government may need to provide various forms of support—legislative, administrative, regulatory and sometimes financial—so as to ensure that the facility is successfully built and adequately operated. Finally, in some projects the Government may become the ultimate owner of the facility.

(b) The project company and the project promoters

71. Privately financed infrastructure projects are usually carried out by a joint venture of companies including construction and engineering companies and suppliers of heavy equipment interested in becoming the main contractors or suppliers of the project. The companies that participate in such a joint venture are referred to in the *Guide* as the "promoters" of the project. Those companies will be intensively involved in the development of the project during its initial phase and their ability to cooperate with each other and to engage other reliable partners will be essential for timely and successful completion of the work. Furthermore, the participation of a company with experience in operating the type of facility being built is an important factor to ensure the long-term viability of the project. Where an independent legal entity is established by the project promoters, other equity investors not otherwise engaged in the project (usually institutional investors, investment banks, bilateral or multilateral lending institutions, sometimes also the Government or a government-owned corporation) may also participate. The participation of local investors, where the project company is required to be established under the laws of the host country (see chap. IV, "Construction and operation of infrastructure", paras. 12-18), is sometimes encouraged by the Government.

(c) Lenders

72. The risks to which the lenders are exposed in project finance, be it non-recourse or limited recourse, are considerably higher than in conventional transactions. This is even more the case where the security value of the physical assets involved (e.g. a road, bridge or tunnel) is difficult to realize, given the lack of a "market" where such assets could easily be sold, or act as obstacles to recovery or repossession. This circumstance affects not only the terms under which the loans are provided (e.g. the usually higher cost of project finance and extensive conditions to funding), but also, as a practical matter, the availability of funds.

73. Owing to the magnitude of the investment required for a privately financed infrastructure project, loans are often organized in the form of "syndicated" loans with one or more banks taking the lead role in negotiating the finance documents on behalf of the other participating financial institutions, mainly commercial banks. Commercial banks that specialize in lending for certain industries are typically not ready to assume risks with which they are not familiar (for a discussion of project risks and risk allocation, see chap. II, "Project risks and government support", paras. 8-29). For example, long-term lenders may not be interested in providing short-term loans to finance infrastructure construction. Therefore, in large-scale projects, different lenders are often involved at different phases of the project. With a view to avoiding disputes that might arise from conflicting actions taken by individual lenders or disputes between lenders over payment of their loans, lenders extending funds to large projects sometimes do so under a common loan agreement. Where various credit facilities are provided under separate loan agreements, the lenders will typically negotiate a so-called "inter-creditor agreement". An inter-creditor agreement usually contains provisions dealing with matters such as provisions for disbursement of payments, pro rata or in a certain order of priority; conditions for declaring events of default and accelerating the maturity of credits; and coordination of foreclosure on security provided by the project company.

(d) International financial institutions and export credit and investment promotion agencies

74. International financial institutions and export credit and investment promotion agencies will have concerns of generally the same order as other lenders to the project. In addition to

this, they will be particularly interested in ensuring that the project execution and its operation are not in conflict with particular policy objectives of those institutions and agencies. Increasing emphasis is being given by international financial institutions to the environmental impact of infrastructure projects and their long-term sustainability. The methods and procedures applied to select the concessionaire will also be carefully considered by international financial institutions providing loans to the project. Many global and regional financial institutions and national development funding agencies have established guidelines or other requirements governing procurement with funds provided by them, which is typically reflected in their standard loan agreements (see also chap. III, "Selection of the concessionaire", para. 18).

(e) Insurers

75. Typically, an infrastructure project will involve casualty insurance covering its plant and equipment, third-party liability insurance and worker's compensation insurance. Other possible types of insurance include insurance for business interruption, interruption in cash flows and cost overrun (see chap. IV, "Construction and operation of infrastructure", paras. 119 and 120). Those types of insurance are usually available on the commercial insurance markets, although the availability of commercial insurance may be limited for certain extraordinary events outside the control of the parties (e.g. war, riots, vandalism, earthquakes or hurricanes). The private insurance market is playing an increasing role in coverage against certain types of political risk, such as contract repudiation, failure by a public authority to perform its contractual obligations or unfair calls for independent guarantees. In some countries, insurance underwriters structure comprehensive insurance packages aimed at avoiding certain risks being left uncovered owing to gaps between individual insurance policies. In addition to private insurance, guarantees against political risks may be provided by international financial institutions, such as the World Bank, the Multilateral Investment Guarantee Agency and the International Finance Corporation, by regional development banks or by export credit and investment promotion agencies (see chap. II, "Project risks and government support", paras. 61-74).

(f) Independent experts and advisers

76. Independent experts and advisers play an important role at various stages of privately financed infrastructure projects. Experienced companies typically supplement their own technical expertise by retaining the services of outside experts and advisers, such as financial experts, international legal counsel or consulting engineers. Merchant and investment banks often act as advisers to project promoters in arranging the finance and in formulating the project to be implemented, an activity that, while essential to project finance, is quite distinct from the financing itself. Independent experts may advise the lenders to the project, for example, on the assessment of project risks in a specific host country. They may also assist public authorities in devising sector-specific strategies for infrastructure development and in formulating an adequate legal and regulatory framework. Furthermore, independent experts and advisers may assist the contracting authority in the preparation of feasibility and other preliminary studies, in the formulation of requests for proposals or standard contractual terms and specifications, in the evaluation and comparison of proposals or in the negotiation of the project agreement.

77. In addition to private entities, a number of intergovernmental organizations (e.g. UNIDO and the regional commissions of the Economic and Social Council) and international financial institutions (e.g. the World Bank and the regional development banks) have special programmes whereby they may either provide this type of technical assistance directly to the Government or assist the latter in identifying qualified advisers.

Notes

[1] UNIDO publication, Sales No. UNIDO.95.6.E, hereafter referred to as the *UNIDO BOT Guidelines*.

United Nations A/CN.9/471/Add.2

General Assembly

Distr.: General
6 December 1999

Original: English

United Nations Commission on International Trade Law
Thirty-third session
New York, 12 June-7 July 2000

Privately financed infrastructure projects: draft chapters of a legislative guide on privately financed infrastructure projects

Report of the Secretary-General

Addendum

I. General legislative and institutional framework

Contents

	Paragraphs	Page
Legislative recommendations		3
Notes on the legislative recommendations	1-53	5
A. General remarks	1	5
B. Constitutional and legislative framework	2-14	5
1. General guiding principles for a favourable constitutional and legislative framework	3-6	5
2. Constitutional law and privately financed infrastructure projects	7-9	6
3. General and sector-specific legislation	10-14	7
C. Scope of authority to award concessions	15-22	8
1. Authorized agencies and relevant fields of activity	16-18	8
2. Purpose and scope of concessions	19-22	9

V.99-90395 (E)

		Paragraphs	Page
D.	Administrative coordination	23-29	10
	1. Coordination of preparatory measures	25-26	10
	2. Arrangements for facilitating the issuance of licences and permits	27-29	11
E.	Authority to regulate infrastructure services	30-53	11
	1. Sectoral competence and mandate of regulatory agencies	33-35	12
	2. Institutional mechanisms	36-38	13
	3. Powers of regulatory agencies	39-42	14
	4. Composition, staff and budget of regulatory agencies	43-45	14
	5. Regulatory process and procedures	46-48	15
	6. Recourse against decisions of the regulatory agency	49-50	16
	7. Settlement of disputes between public service providers	51-53	16

Legislative recommendations

For host countries wishing to promote privately financed infrastructure projects it is recommended that the following principles be implemented by the law:

Constitutional and legislative framework (paras. 2-14)

Recommendation 1. The legislative and institutional framework for the implementation of privately financed infrastructure projects should ensure transparency, fairness and the long-term sustainability of projects. Undesirable restrictions on private sector participation in infrastructure development and operation should be eliminated.

Scope of authority to award concessions (paras. 15-22)

Recommendation 2. The law should identify the public authorities of the host country (including, as appropriate, national, provincial and local authorities) that are empowered to enter into agreements for the implementation of privately financed infrastructure projects.

Recommendation 3. Privately financed infrastructure projects may include concessions for the construction and operation of new infrastructure facilities and systems or the maintenance, modernization, expansion and operation of existing infrastructure facilities and systems.

Recommendation 4. The law should identify the sectors or types of infrastructure in respect of which concessions may be granted.

Recommendation 5. The law should specify whether a concession might extend to the entire region under the jurisdiction of the respective contracting authority, to a geographical subdivision thereof or to a discrete project, and whether it might be awarded with or without exclusivity, as appropriate, in accordance with rules and principles of law, statutory provisions, regulations and policies applying to the sector concerned. Contracting authorities might be jointly empowered to award concessions beyond a single jurisdiction.

Administrative coordination (paras. 23-29)

Recommendation 6. Institutional mechanisms should be established to coordinate the activities of the public authorities responsible for issuing approvals, licences, permits or authorizations required for the implementation of privately financed infrastructure projects in accordance with statutory or regulatory provisions on the construction and operation of infrastructure facilities of the type concerned.

Authority to regulate infrastructure services (paras. 30-53)

Recommendation 7. The authority to regulate infrastructure services should not be entrusted to entities that directly or indirectly provide infrastructure services.

Recommendation 8. Regulatory competence should be entrusted to functionally independent bodies with a level of autonomy sufficient to ensure that their decisions are taken without political interference or inappropriate pressures from infrastructure operators and public service providers.

Recommendation 9. The rules governing regulatory procedures should be made public. Regulatory decisions should state the reasons on which they are based and should be accessible to interested parties through publication or other means.

Recommendation 10. The law should establish transparent procedures whereby the concessionaire may request a review of regulatory decisions by an independent and impartial body and should set forth the grounds on which a request for review may be based and the availability of court review.

Recommendation 11. Where appropriate, special procedures should be established for handling disputes among public service providers concerning alleged violations of laws and regulations governing the relevant sector.

Notes on the legislative recommendations

A. General remarks

1. The establishment of an appropriate and effective legal framework is a prerequisite to creating an environment that fosters private investment in infrastructure. For countries where such a legal framework already exists, it is important to ensure that the law is sufficiently flexible and responsive to keep pace with the developments in various infrastructure sectors. This chapter deals with some general issues that domestic legislatures are advised to consider when setting up or reviewing the legal framework for privately financed infrastructure projects in order to achieve the above objectives. Section B (paras. 2-14) sets out general considerations on the constitutional and legislative framework; section C (paras. 15-22) deals with the scope of authority to award infrastructure and public services concessions; section D (paras. 23-29) discusses possible measures to enhance administrative coordination; and section E (paras. 30-53) deals with institutional and procedural arrangements for the regulation of infrastructure sectors.

B. Constitutional and legislative framework

2. This section considers general guiding principles that may inspire the legal framework for privately financed infrastructure projects. It further points out the possible implications that the constitutional law of the host country may have for the implementation of these projects. Lastly, this section deals briefly with possible choices to be made regarding the level and type of instrument that might need to be enacted and their scope of application.

1. General guiding principles for a favourable constitutional and legislative framework

3. In considering the establishment of an enabling legal framework or in reviewing the adequacy of the existing framework, domestic legislators may wish to take into account some general principles that have inspired recent legislative actions in various countries, which are discussed briefly in the following paragraphs.

(a) Transparency

4. A transparent legal framework is characterized by clear and readily accessible rules and by efficient procedures for their application. Transparent laws and administrative procedures create predictability, enabling potential investors to estimate the costs and risks of their investment and thus to offer their most advantageous terms. Transparent laws and administrative procedures may also foster openness through provisions requiring the publication of administrative decisions and the disclosure of information of public relevance. They also help to guard against arbitrary or improper actions or decisions by the contracting authority or its officials and thus help to promote confidence in a country's infrastructure development programme. Transparency of laws and administrative procedures is of particular importance where foreign investment is sought, since foreign companies may be unfamiliar with the country's practices for the award of infrastructure projects.

(b) Fairness

5. The legal framework is both the means by which Governments regulate and ensure the provision of public services to their citizens and the means by which public service providers

and their customers may protect their rights. A fair legal framework takes into account the various (and sometimes possibly conflicting) interests of the Government, the public service providers and their customers and seeks to achieve an equitable balance between them. The private sector's business considerations, the users' right to adequate services, both in terms of quality and price, the Government's responsibility for ensuring the continuous provision of essential services and its role in promoting national infrastructure development are but a few of the interests that deserve appropriate recognition in the law.

(c) Long-term sustainability

6. An important objective of domestic legislation on infrastructure development is to ensure the long-term provision of public services, with increasing attention being paid to environmental sustainability. Inadequate arrangements for the operation and maintenance of public infrastructure severely limit efficiency in all sectors of infrastructure and result directly in reduced service quality and increased costs for users. From a legislative perspective, it is important to ensure that the host country has the institutional capacity to undertake the various tasks entrusted to public authorities involved in infrastructure projects throughout their phases of implementation. Another measure to enhance the long-term sustainability of a national infrastructure policy is to achieve a correct balance between competitive and monopolistic provision of public services. Competition may reduce overall costs and provide more back-up facilities for essential services. In certain sectors, competition has also helped to increase the productivity of infrastructure investment, to enhance responsiveness to the needs of the customers and to obtain better quality for public services, thus improving the business environment in all sectors of the economy.

2. Constitutional law and privately financed infrastructure projects

7. The constitutional law of a number of countries refers generally to the duty of the State to ensure the provision of public services. Some of them list the infrastructure and services sectors that come under the responsibility of the State, while in others the task of identifying those sectors is delegated to the legislator. Under some national constitutions, the provision of certain public services is reserved exclusively to the State or to specially created public entities. Other constitutions, however, authorize the State to award concessions to private entities for the development and operation of infrastructure and the provision of public services. In some countries, there are limitations to the participation of foreigners in certain sectors or requirements that the State should participate in the capital of the companies providing public services.

8. For countries wishing to promote private investment in infrastructure it is important to review existing constitutional rules so as to identify possible restrictions to the implementation of privately financed infrastructure projects. In some countries, privately financed infrastructure projects have been delayed by uncertainties regarding the extent of the State's authority to award them. Sometimes, concerns that those projects might contravene constitutional rules on state monopolies or on the provision of public services have led to judicial disputes, with a consequent negative impact on the implementation of the projects.

9. It is further important to take into account constitutional rules relating to the ownership of land or infrastructure facilities. The constitutional law of some countries contains limitations to private ownership of land and certain means of production. In other countries, private property is recognized, but the constitution declares all or certain types of infrastructure to be state property. Prohibitions and restrictions of this nature can be an obstacle to the execution of projects that entail private operation, or private operation and ownership, of the relevant

infrastructure (see further chap. IV, "Construction and operation of infrastructure", paras. 23-29).

3. General and sector-specific legislation

10. Legislation frequently plays a central role in promoting private investment in public infrastructure projects. The law typically embodies a political commitment, provides specific legal rights and may represent an important guarantee of stability of the legal and regulatory regime. In most countries, the implementation of privately financed infrastructure projects was in fact preceded by legislative measures setting forth the general rules under which those projects are awarded and executed.

11. In some countries, as a matter of constitutional law or legislative practice, specific legislation may need to be adopted in respect of individual projects. In other countries with a well-established tradition of awarding concessions to the private sector for the provision of public services, the Government is authorized by general legislation to award to the private sector any activity carried out by the public sector that has an economic value that makes such activity capable of being exploited by private entities. General legislation of this type creates a framework for providing a uniform treatment to issues that are common to privately financed projects in different infrastructure sectors.

12. However, by its very nature, general legislation is normally not suitable to address all the particular requirements of different sectors. Even in countries that have adopted general legislation addressing cross-sectoral issues, it has been found that supplementary sector-specific legislation allows the legislator to formulate rules that take into account the market structure in each sector (see above, "Introduction and background information on privately financed infrastructure projects", paras. 21-46). It should be noted that in many countries sector-specific legislation was adopted at a time when a significant portion, or even the entirety of the national infrastructure constituted state monopolies. For countries interested in promoting private sector investment in infrastructure it is advisable to review existing sector-specific legislation so as to ascertain its suitability for privately financed infrastructure projects.

13. Sector-specific legislation may further play an important role in establishing a framework for the regulation of individual infrastructure sectors (see below, paras. 30-53). Legislative guidance is particularly useful in countries at the initial stages of setting up or developing national regulatory capacities. Such legislation represents a useful assurance that the regulators do not have unlimited discretion in the exercise of their functions, but are bound by the parameters provided by the law. However, it is generally advisable to avoid rigid or excessively detailed legislative provisions dealing with contractual aspects of the implementation of privately financed infrastructure projects, which in most cases would not be adequate to their long-term nature (see further chap. IV, "Construction and operation of infrastructure", and chap. V, "Duration, extension and termination of the project agreement").

14. Many countries have used legislation to establish the general principles for the organization of infrastructure sectors and the basic policy, institutional and regulatory framework. However, the law may not be the best instrument to set detailed technical and financial requirements. Many countries have preferred to enact regulations setting forth more detailed rules to implement the general provisions of domestic laws on privately financed infrastructure projects. Regulations are found to be easier to adapt to a change in environment, whether the change results from the transition to market-based rules or from external

developments, such as new technologies or changing economic or market conditions. Whatever the instrument used, clarity and predictability are of the essence.

C. Scope of authority to award concessions

15. The implementation of privately financed infrastructure projects may require the enactment of special legislation or regulations authorizing the State to entrust the provision of public services to private entities. The enactment of express legislative authorization may be an important measure to foster the confidence of potential investors, national or foreign, in a national policy to promote private sector investment in infrastructure. Central elements to the authority to award concessions for infrastructure projects are discussed in the following paragraphs.

1. Authorized agencies and relevant fields of activity

16. In some legal systems the Government's responsibility for the provision of public services may not be delegated without prior legislative authorization. For those countries which wish to attract private investment in infrastructure, it is particularly important to state clearly in the law the authority to entrust entities other than public authorities of the host country with the right to provide certain public services. Such a general provision may be particularly important in those countries where public services are governmental monopolies or where it is envisaged to engage private entities to provide certain services that used to be available to the public free of charge (see further chap. IV, "Construction and operation of infrastructure", paras. 37 and 38).

17. Where general legislation is adopted, it is also advisable to identify clearly the public authorities or levels of government competent to award infrastructure projects and to act as contracting authorities. In order to avoid unnecessary delay, it is particularly advisable to have rules in place that make it possible to ascertain the persons or offices that have the authority to enter into commitments on behalf of the contracting authority (and, as appropriate, of other public authorities) at different stages of negotiation and to sign the project agreement. It is useful to consider the extent of powers that may be needed by authorities other than the central Government to carry out projects falling within their purview. For projects involving offices or agencies at different levels of government (for example, national, provincial or local), where it is not possible to identify in advance all the relevant offices and agencies involved, other measures may be needed to ensure appropriate coordination among them (see below, paras. 23-29).

18. For purposes of clarity, it is advisable to identify in such general legislation those sectors in which concessions may be awarded. Alternatively, where this is not deemed feasible or desirable, the law might identify those activities which may not be the object of a concession (for example, activities related to national defence or security).

2. Purpose and scope of concessions

19. It may be useful for the law to define the nature and purpose of privately financed infrastructure projects for which concessions may be awarded in the host country. One possible approach may be to define the various categories of projects according to the extent of the rights and obligations assumed by the concessionaire (for example, "build-operate-transfer", "build-own-operate", "built-transfer-operate" and "build- transfer"). However, given the wide variety of schemes that may come into play in connection with private investment in infrastructure, it may be difficult to provide exhaustive definitions of all of them. As an alternative, the law could generally provide that concessions may be awarded for the purpose of entrusting an entity, private or public, with the obligation to carry out infrastructure works and deliver certain public services, in exchange for the right to charge a price for the use of the facility or premises or for the service or goods it generates, or for other payment or remuneration agreed to by the parties. The law could further clarify that concessions may be awarded for the construction and operation of a new infrastructure facility or system or for maintenance, repair, refurbishment, modernization, expansion and operation of existing infrastructure facilities and systems, or only for the management and delivery of a public service.

20. Another important issue concerns the nature of the rights vested in the concessionaire, in particular whether the right to provide the service is exclusive or whether the concessionaire will face the competition from other infrastructure facilities or service providers. Exclusivity may concern the right to provide a service in a particular geographical region (for example, a communal water distribution company) or embrace the whole territory of the country (for example, a national railway company); it may relate to the right to supply one particular type of goods or services to one particular customer (for example, a power generator being the exclusive regional supplier to a power transmitter and distributor) or to a limited group of customers (for example, a national long-distance telephone carrier providing connections to local telephone companies).

21. The decision whether or not to grant exclusivity rights to a certain project or category of projects should be taken in the light of the host country's policy for the sector concerned. As discussed earlier, the scope for competition varies considerably in different infrastructure sectors. While certain sectors, or segments thereof, have the characteristics of natural monopolies, in which case open competition is usually not an economically viable alternative, other infrastructure sectors have been successfully opened to free competition (see "Introduction and background information on privately financed infrastructure projects", paras. 28 and 29).

22. It is desirable therefore to deal with the issue of exclusivity in a flexible manner. Rather than excluding or prescribing exclusive concessions, it may be preferable for the law to authorize the grant of exclusive concessions when it is deemed to be in the public interest, such as in cases where the exclusivity is justified for the purpose of ensuring the technical or economical viability of the project. The contracting authority may be required to state the reasons for envisaging an exclusive concession prior to starting the procedure to select the concessionaire. Such general legislation may be supplemented by sector-specific laws regulating the issue of exclusivity in a manner suitable for each particular sector.

D. Administrative coordination

23. Depending on the administrative structure of the host country, privately financed infrastructure projects may require the involvement of several public authorities, at various levels of government. For instance, the competence to lay down regulations and rules for the activity concerned may rest in whole or in part with a public authority at a level different from the one that is responsible for providing the relevant service. It may also be that both the regulatory and the operational functions are combined in one entity, but that the authority to award government contracts is centralized in a different public authority. For projects involving foreign investment, it may also happen that certain specific competences fall within the mandate of an agency responsible for approving foreign investment proposals.

24. Recent international experience has demonstrated the usefulness of entrusting a central unit within the host country's administration with the overall responsibility for formulating policy and providing practical guidance on privately financed infrastructure projects. Such a central unit may also be responsible for coordinating the input of the main public authorities that interface with the project company. It is recognized, however, that such an arrangement may not be possible in some countries, owing to their particular administrative organization. Where it is not feasible to establish such a central unit, other measures may be considered to ensure an adequate level of coordination among the various public authorities involved, as discussed in the following paragraphs.

1. Coordination of preparatory measures

25. One important measure to ensure the successful implementation of privately financed infrastructure projects is the requirement that the relevant public authority conduct a preliminary assessment of the project's feasibility, including economic and financial aspects such as expected economic advantages of the project, estimated cost and potential revenue anticipated from the operation of the infrastructure facility and the environmental impact of the project. The studies prepared by the contracting authority should, in particular, identify clearly the expected output of the project, provide sufficient justification for the investment, propose a modality for private sector participation and describe a particular solution to the output requirement.

26. Following the identification of the future project, it is for the Government to establish its relative priority and to assign human and other resources for its implementation. At that point, it is desirable that the contracting authority review existing statutory or regulatory requirements relating to the operation of infrastructure facilities of the type proposed with a view to identifying the main public authorities whose input will be required for the implementation of the project. It is also important at this stage to consider the measures that may be required in order for the contracting authority and the other public authorities involved to perform the obligations they may reasonably anticipate in connection with the project. For instance, the Government may need to make advance budgeting arrangements to enable the contracting authority or other public authorities to meet financial commitments that extend over several budgetary cycles, such as long-term commitments to purchase the project's output (see chap. IV, "Construction and operation of infrastructure", paras. 50 and 51). Furthermore, a series of administrative measures may be needed to implement certain forms of support provided to the project, such as tax exemptions and customs facilitation (see chap. II, "Project risks and government support", paras. 51-54), which may require considerable time.

2. Arrangements for facilitating the issuance of licences and permits

27. Legislation may play a useful role in facilitating the issuance of licences and permits that may be needed in the course of a project (such as licences under foreign exchange regulations; licences for the incorporation of the concessionaire; authorizations for the employment of foreigners; registration and stamp duties for the use or ownership of land; import licences for equipment and supplies; construction licences; licences for the installation of cables or pipelines; licences for bringing the facility into operation; and spectrum allocation for mobile communication). The required licences or permits may fall within the competence of various organs at different levels of the administration and the time required for their issuance may be significant, in particular when the approving organs or offices were not originally involved in conceiving the project or negotiating its terms. Delay in bringing an infrastructure project into operation as a result of missing licences or permits for reasons not attributable to the concessionaire is likely to result in an increase in the cost of the project and in the price paid by the users.

28. Thus, it is advisable to conduct an early assessment of licences and permits needed for a particular project in order to avoid delay in the implementation phase. A possible measure to enhance the coordination in the issuance of licences and permits might be to entrust one organ with the authority to receive the applications for licences and permits, to transmit them to the appropriate agencies and to monitor the issuance of all licences and permits listed in the request for proposals and other licences that might be introduced by subsequent regulations. The law may also authorize the relevant agencies to issue provisional licences and permits and provide a time period beyond which those licences and permits are deemed to be granted unless they are rejected in writing.

29. However, it should be noted that the distribution of administrative authority among various levels of government (for example, local, regional and central) often reflects fundamental principles of a country's political organization. Therefore, there are instances where the central Government would not be in a position to assume responsibility for the issuance of all licences and permits or to entrust one single body with such a coordinating function. In those cases, it is important to introduce measures to counter the possibility of delay that might result from such distribution of administrative authority, such as, for instance, agreements between the contracting authority and the other public authorities concerned to facilitate the procedures for a given project or other measures intended to ensure an adequate level of coordination among the various public authorities involved and to make the process of obtaining licences more transparent and efficient. Furthermore, the Government might consider providing some assurance that it will assist the concessionaire as much as possible in obtaining licences required by domestic law, for instance by providing information and assistance to bidders regarding the required licences, as well as the relevant procedures and conditions. From a practical point of view, in addition to coordination among various levels of government and various public authorities, there is a need to ensure consistency in the application of criteria for the issuance of licences and for the transparency of the administrative process.

E. Authority to regulate infrastructure services

30. The provision of certain public services is generally subject to a special regulatory regime that may consist of substantive rules, procedures, instruments and institutions. That framework represents an important instrument to implement the governmental policy for the sector concerned (see "Introduction and background information on privately financed infrastructure projects", paras. 21-46). Depending on the institutional structure of the country concerned and on the allocation of powers between different levels of government, provincial or local

legislation may govern some infrastructure sectors, in full or concurrently with national legislation.

31. Regulation of infrastructure services involves a wide range of general and sector-specific issues, which may vary considerably according to the social, political, legal and economic reality of each host country. While occasionally discussing some of the main regulatory issues that are encountered in a similar context in different sectors (see, for instance, chapter IV, "Construction and operation of infrastructure", paras. 39-46 and 82-95), the *Guide* is not intended to exhaust the legal or policy issues arising out of the regulation of various infrastructure sectors. The term "regulatory agencies" refers to the institutional mechanisms required to implement and monitor the rules governing the activities of infrastructure operators. Because the rules applicable to infrastructure operation often allow for a degree of discretion, a body is required to interpret and apply them, monitor compliance, impose sanctions and settle disputes arising out of the implementation of the rules. The specific regulatory tasks and the amount of discretion they involve will be determined by the rules in question, which can vary widely.

32. The *Guide* assumes that the host country has in place the proper institutional and bureaucratic structures and human resources necessary for the implementation of privately financed infrastructure projects. Nevertheless, as a contribution to domestic legislatures considering the need for, and desirability of, establishing regulatory agencies for monitoring the provision of public services, this section discusses some of the main institutional and procedural issues that may arise in that connection. The discussion contained in this section is illustrative of different options that have been used in domestic legislative measures to set up a regulatory framework for privately financed infrastructure projects, but the *Guide* does not thereby advocate the establishment of any particular model or administrative structure. Practical information and technical advice may be obtained from international financial institutions that carry out programmes to assist their member countries in setting up an adequate regulatory framework (such as the World Bank and the regional development banks).

1. Sectoral competence and mandate of regulatory agencies

33. Regulatory responsibilities may be organized on a sectoral or cross-sectoral basis. Countries that have opted for a sectoral approach have in many cases decided to place closely linked sectors or segments thereof under the same regulatory structure (for example, a common regulatory agency for power and gas or for airports and airlines). Other countries have organized regulation on a cross-sectoral basis, in some cases with one regulatory entity for all infrastructure sectors, and in others with one entity for utilities (water, power, gas, telecommunications) and one for transport. In some countries the competence of regulatory agencies might also extend to several sectors within a given region.

34. Regulatory agencies whose competence is limited to a particular sector usually foster the development of technical, sector-specific expertise. Sector-specific regulation may facilitate the development of rules and practices that are tailored to the needs of the sector concerned. However, the decision between sector-specific and cross-sectoral regulation depends in part on the country's regulatory capacity. Countries with limited expertise and experience in infrastructure regulation may find it preferable to reduce the number of independent structures and try to achieve economies of scale.

35. The law setting up a regulatory mechanism often stipulates a number of general objectives that should guide the actions of regulatory agencies, such as the promotion of competition, the protection of users' interests, the satisfaction of demand, the efficiency of the

sector or the public service providers, their financial viability, the safeguarding of the public interest or of public service obligations and the protection of investors' rights. Having one or two overriding objectives helps clarify the mandate of regulatory agencies and establish priorities among sometimes conflicting objectives. A clear mandate may also increase a regulatory agency's autonomy and credibility.

2. Institutional mechanisms

36. The range of institutional mechanisms for the regulation of infrastructure sectors varies greatly. While there are countries that entrust regulatory functions to organs of the Government (for example, the concerned ministries or departments), other countries have preferred to establish autonomous regulatory agencies, separate from the Government. Some countries have decided to subject certain infrastructure sectors to autonomous and independent regulation while leaving others under ministerial regulation. Sometimes, powers may also be shared between an autonomous regulatory agency and the Government, as is often the case with respect to licensing. From a legislative perspective, it is important to devise institutional arrangements for the regulatory functions that ensure to the regulatory agency an adequate level of efficiency, taking into account the political, legal and administrative tradition of the country.

37. The efficiency of the regulatory regime is in most cases a function of the objectiveness with which regulatory decisions are taken. This, in turn, requires that regulatory agencies should be able to take decisions without interference or inappropriate pressures from infrastructure operators and public service providers. To that effect, legislative provisions in several countries require the independence of the regulatory decision-making process. In order to achieve the desired level of independence it is advisable to separate the regulatory functions from operational ones by removing any regulatory functions that may still be vested with the public service providers and entrust them to a legally and functionally independent entity. Regulatory independence is supplemented by provisions to prevent conflicts of interest, such as prohibitions for staff of the regulatory agency to hold mandates, accept gifts, enter into contracts or have any other relationship (directly or through family members or other intermediaries) with regulated companies, their parents or affiliates.

38. This leads to a related issue, namely the need to minimize the risk of decisions being made or influenced by a body that is also the owner of enterprises operating in the regulated sector or a body acting on political rather than technical grounds. In some countries it was felt necessary to provide the regulatory agency with a certain degree of autonomy vis-à-vis the political organs of government. Independence and autonomy should not be considered solely on the basis of the institutional position of the regulatory function, but also on the basis of its functional autonomy (i.e. the availability of sufficient financial and human resources to discharge their responsibilities adequately).

3. Powers of regulatory agencies

39. Regulatory agencies may have decision-making powers, advisory powers or purely consultative powers or a combination of these different levels of powers depending on the subject matter. In some countries, regulatory agencies were initially given limited powers, which were expanded later as the agencies established a track record of independence and professionalism. The legislation often specifies which powers are vested with the Government and which with a regulatory agency. Clarity in this respect is important to avoid unnecessary conflicts and confusion. Investors, as well as consumers and other interested parties, should know to whom to turn with various requests, applications or complaints.

40. Selection of public service providers, for example, is in many countries a process involving the Government as well as the regulatory agency. If the decision to award a project involves broad judgement of a political rather than technical nature, which may often be the case in the context of infrastructure privatization, final responsibility often rests with the Government. If, however, the award criteria are more technical, as may be the case with a liberal licensing regime for power generation or telecommunications services, many countries entrust the decision to an independent regulatory agency. In other cases, the Government may have to ask the regulatory agency's opinion prior to awarding a concession. On the other hand, some countries exclude direct involvement of regulatory agencies in the award process on the basis that it could affect the way they later regulate the provision of the service concerned.

41. The jurisdiction of regulatory agencies normally extends to all enterprises operating in the sectors they regulate, with no distinction between private and public enterprises. The use of some regulatory powers or instruments may be limited by law to the dominant public service providers in the sector. A regulatory agency may, for example, have price policing powers only vis-à-vis the incumbent or dominant public service provider, while new entrants may be allowed to set prices freely.

42. The matters on which regulatory agencies have to pronounce themselves range from normative responsibilities (for example, rules on the award of concessions and conditions for certification of equipment) to the actual award of concessions; the modification of such instruments; the approval of contracts or decisions proposed by the regulated entities (for example, a schedule or contract on network access); the definition and monitoring of an obligation to provide certain services; the oversight over public service providers (in particular compliance with licence conditions, norms and performance targets); price setting or adjustments; vetting of subsidies, exemptions or other advantages that could distort competition in the sector; sanctions; and dispute settlement.

4. Composition, staff and budget of regulatory agencies

43. When setting up a regulatory agency, a few countries have opted for an agency comprised of a single officer, whereas most others have preferred a regulatory commission. A commission may provide greater safeguards against undue influence or lobbying and may limit the risk of rash regulatory decisions. A one-person regulatory agency, on the other hand, may be able to reach decisions faster and may be held more accountable. To improve the management of the decision-making process in a regulatory commission, the number of members is often kept small (typically three or five members). Even numbers are often avoided to prevent a deadlock, though the chairman could have a casting vote.

44. To increase the regulatory agency's autonomy, different institutions may be involved in the nomination process. In some countries regulatory agencies are appointed by the head of State based on a list submitted by parliament; in others the executive branch of the Government

appoints the regulatory agency but subject to confirmation by parliament or upon nominations submitted by parliament, user associations or other bodies. Minimum professional qualifications are often required of the officials of the regulatory agencies, as well as the absence of conflicts of interest that might disqualify them fromthe function. Terms of office of members of regulatory boards may be staggered in order to prevent total turnover and appointment of all members by the same administration; staggering also promotes continuity in regulatory decision-making. Terms of office are often for a fixed term, may be non-renewable and may be terminated before the expiry of the term for limited reasons only (such as criminal conviction, mental incapacitation, gross negligence or dereliction of duty). Regulatory agencies are often faced with experienced lawyers, accountants and other experts working for the regulated industry and need to be able to acquire the same level of expertise, skills and professionalism, either in-house or by hiring outside advisers as needed.

45. Stable funding sources are critical in order for the regulatory agency to function adequately. In many countries, the budget of the regulatory agency is funded by fees and other levies on the regulated industry. Fees may be set as a percentage of the turnover of the public service providers or be levied for the award of licences, concessions or other authorizations. In some countries, the agency's budget is complemented as needed by budget transfers provided in the annual finance law. However, this may create an element of uncertainty that may reduce the agency's autonomy.

5. Regulatory process and procedures

46. The regulatory framework typically includes procedural rules governing the way the institutions in charge of the various regulatory functions have to exercise their powers. The credibility of the regulatory process requires transparency and objectivity, irrespective of whether regulatory authority is exercised by a government department or minister or by an autonomous regulatory agency. Rules and procedures should be objective and clear so as to ensure fairness, impartiality and timely action by the regulatory agency. For purposes of transparency, the law should require that they be made public. Regulatory decisions should state the reasons on which they are based and should be made accessible to interested parties, through publication or other appropriate means.

47. Transparency may be further enhanced, as required by some laws, by the publication by the regulatory agency of an annual report on the sector, including, for example, the decisions taken during the exercise, the disputes that have arisen and the way they were settled. Such an annual report may also include the accounts of the regulatory agency and an audit thereof by an independent auditor. Legislation in many countries further requires that this annual report be submitted to a committee of parliament.

48. Regulatory decisions may have an impact on the interests of diverse groups, including the concerned public service provider, its current or potential competitors and business or non-business users. In many countries, the regulatory process includes consultation procedures for major decisions or recommendations. In some countries, that consultation takes the form of public hearings, in others of consultation papers on which comments from interested groups are solicited. Some countries have also established consultative bodies comprised of users and other concerned parties and require that their opinion be sought before major decisions and recommendations are made. To enhance transparency, comments, recommendations or opinions resulting from the consultation process may have to be published or made publicly available.

6. Recourse against decisions of the regulatory agency

49. Another important element of the host country's regulatory regime are the mechanisms whereby public service providers may request a review of regulatory decisions. As with the whole regulatory process, a high degree of transparency and credibility is essential. To be credible, the review should be entrusted to an entity that is independent from the regulatory agency taking the original decision, from the political authorities of the host country and from the public service providers.

50. Review of decisions of regulatory agencies is often in the jurisdiction of courts, but in some legal systems recourse against decisions by regulatory agencies is in the exclusive jurisdiction of special tribunals dealing solely with administrative matters, which in some countries are separate from the judicial system. If there are concerns over the review process (for example, as regards possible delays or the capacity of courts to make evaluations of the complexeconomic issues involved in regulatory decisions) review functions may be entrusted to another body, at least in the first instance, before a final recourse to courts or administrative tribunals. In some countries, requests for review are considered by a high-level cross-sectoral independent oversight body. There are also countries where requests for review are heard by a panel composed of persons holding specified judicial and academic functions. As to the grounds on which a request for review may be based, in many cases there are limits, in particular as to the right of the appellate body to substitute its own discretionary assessment of facts for the assessment of the body whose decision is being reviewed.

7. Settlement of disputes between public service providers

51. Disputes may arise between competing concessionaires (for example, two operators of cellular telephony systems) or between concessionaires providing services in different segments of the same infrastructure sector. Such disputes may involve allegations of unfair trade practices (for example, price dumping), uncompetitive practices inconsistent with the country's infrastructure policy (see "Introduction and background information on privately financed infrastructure projects", paras. 23-29) or violation of specific duties of public service providers (see chap. IV, "Construction and operation of infrastructure", paras. 82-93). In many countries, legislative provisions have been found necessary in order to establish an appropriate framework for the settlement of these disputes.

52. Firstly, the various parties may not have contractual arrangements with one another that could provide for an appropriate dispute settlement mechanism. Even where it would be possible to establish a contractual mechanism, the host country may have an interest that disputes involving certain issues (for example, conditions of access to a given infrastructure network) be settled by a specific body in order to ensure consistency in the application of the relevant rules. Furthermore, certain disputes between public service providers may involve issues that, under the laws of the host country, are not considered to be capable of being settled through arbitration.

53. Domestic laws often establish administrative procedures for handling disputes between public service providers. Typically, public service providers may file complaints with the regulatory agency or with another governmental agency responsible for the application of the rules alleged to have been violated (for example, a governmental body in charge of enforcing competition laws and regulations), which in some countries has the authority to issue a binding decision on the matter. Such mechanisms, even where mandatory, do not necessarily preclude resort by the aggrieved persons to courts, although in some legal systems the courts may only have the power to control the legality of the decision (for example, observance of due process) but not its merits.

United Nations A/CN.9/471/Add.3

General Assembly

Distr.: General
3 December 1999

Original: English

United Nations Commission on International Trade Law
Thirty-third session
New York, 12 June-7 July 2000

Privately financed infrastructure projects: draft chapters of a legislative guide on privately financed infrastructure projects

Report of the Secretary-General

Addendum

II. Project risks and government support

Contents

	Paragraphs	Page
Legislative recommendations		2
Notes on the legislative recommendations	1-74	3
A. General remarks	1-7	3
B. Project risks and risk allocation	8-29	4
1. Overview of main categories of project risk	11-20	5
2. Contractual arrangements for risk allocation and mitigation	21-29	7
C. Government support	30-60	9
1. Policy considerations relating to government support	32-34	10
2. Forms of government support	35-60	11
D. Guarantees provided by international financial institutions	61-71	18
1. Guarantees provided by multilateral lending institutions	62-66	18
2. Guarantees provided by the Multilateral Investment Guarantee Agency	67-71	19
E. Guarantees provided by export agencies and investment promotion agencies	72-74	20

V.99-90401 (E)

Legislative recommendations

For host countries wishing to promote privately financed infrastructure projects it is recommended that the following principles be implemented by the law:

Project risks and risk allocation (see paras. 8-29)

Recommendation 12. No unnecessary statutory or regulatory limitations should be placed upon the contracting authority's ability to agree on an allocation of risks that is suited to the needs of the project.

Government support (see paras. 30-60)

Recommendation 13. The law should clearly state which public authorities of the host country may provide financial or economic support to the implementation of privately financed infrastructure projects and which types of support they are authorized to provide.

Notes on the legislative recommendations

A. General remarks

1. Privately financed infrastructure projects create opportunities for reducing the commitment of public funds and other resources for infrastructure development and operation. They also make it possible to transfer to the private sector a number of risks that would otherwise be borne by the Government. The precise allocation of risks among the various parties involved is typically defined after consideration of a number of factors, including the public interest in the development of the infrastructure in question and the level of risk faced by the project company, other investors and lenders (and the extent of their ability and readiness to absorb those risks at an acceptable cost). Adequate risk allocation is essential to reducing project costs and to ensuring the successful implementation of the project. Conversely, an inappropriate allocation of project risks may compromise the project's financial viability or hinder its efficient management, thus increasing the cost at which the service is provided.

2. In the past, debt financing for infrastructure projects was obtained on the basis of credit support from project sponsors, multilateral and national export credit agencies, Governments and other third parties. In recent years, these traditional sources have not been able to meet the growing needs for infrastructure capital and financing has been increasingly obtained on a project finance basis.

3. Project finance, as a method of financing, seeks to establish the creditworthiness of the project company on a "stand alone" basis, even before construction has begun or any revenues have been generated, and to borrow on the basis of that credit. Commentators have observed that project finance may hold the key to unlocking the vast pools of capital theoretically available in the capital markets for investment in infrastructure. However, project finance has distinctive and demanding characteristics from a financial point of view. Principal among these is that, in a project finance structure, financing parties must rely mainly upon the project company's assets and cash flows for repayment. If the project fails they will have no recourse, or only limited recourse, to the financial resources of a sponsor company or other third party for repayment (see also "Introduction and background information on privately financed infrastructure projects", paras. 54 and 55).

4. The financial methodology of project financing requires a precise projection of the capital costs, revenues and projected costs, expenses, taxes and liabilities of the project. In order to predict these numbers precisely and with certainty and to create a financial model for the project, it is typically necessary to project the "base case" amounts of revenues, costs and expenses of the project company over a long period—often 20 years or more—in order to determine the amounts of debt and equity the project can support. Central to this analysis is the identification and quantification of risks. For this reason, the identification, assessment, allocation and mitigation of risks is at the heart of project financing from a financial point of view.

5. Among the most important, yet difficult, risks to assess and to mitigate are "political risks" (risks associated with adverse actions of the host Government, its agencies and its courts, in particular in granting licences and permits, adopting regulations applicable to the project company and its markets, taxation and the performance and enforcement of contractual obligations) and "currency risks" (risks related to the value, transferability and convertibility of the local currency). In order to guard against such risks, in particular project finance

structures have often incorporated insurance or guarantees of international financial institutions and export credit agencies as well as guarantees of the host Government.

6. Section B of the present chapter (paras. 8-29) gives an overview of the main risks encountered in privately financed infrastructure projects and contains a brief discussion of common contractual solutions for risk allocation, which emphasizes the need to provide the parties with the necessary flexibility for negotiating a balanced allocation of project risks. Section C (paras. 30-60) sets out policy considerations the Government may wish to take into account when designing the level of direct governmental support that may be provided to infrastructure projects, such as the degree of public interest in the execution of any given project and the need to avoid the assumption by the Government of open-ended or excessive contingent liabilities. Section C considers some additional support measures that have been used in governmental programmes to promote private investment in infrastructure development, without advocating the use of any of them in particular. Lastly, sections D (paras. 61-71) and E (paras. 72-74) outline guarantees and support measures that may be provided by export credit agencies and investment promotion agencies.

7. Other chapters of this *Guide* deal with related aspects of the host Government's legal regime that are of relevance to the credit and risk analysis of a project. Depending upon the sector and type of project the emphasis will, of course, vary. The reader is referred in particular to chapters IV, "Construction and operation of infrastructure"; V, "Duration, extension and termination of the project agreement"; VI, "Settlement of disputes"; and VII, "Other relevant areas of law".

B. Project risks and risk allocation

8. As used in this chapter, the notion of "project risks" refers to those circumstances which, in the assessment of the parties, may have a negative effect on the benefit they expect to achieve with the project. While there may be events that would represent a serious risk for most parties (for example, the physical destruction of the facility by a natural disaster), each party's risk exposure will vary according to its role in the project.

9. The expression "risk allocation" refers to the determination of which party or parties should bear the consequences of the occurrence of events identified as project risks. For example, if the project company is obliged to deliver the infrastructure facility to the contracting authority with certain equipment in functioning condition, the project company is bearing the risk that the equipment may fail to function at the agreed performance levels. The occurrence of that project risk, in turn, may have a series of consequences for the project company, including its liability for failure to perform a contractual obligation under the project agreement or the applicable law (for example, payment of damages to the contracting authority for delay in bringing the facility into operation); certain losses (for example, loss of revenue as a result of delay in beginning operating the facility); or additional cost (for example, cost of repair of faulty equipment or of securing replacement equipment).

10. The party bearing a given risk may take preventive measures with a view to limiting the likelihood of the risk, as well as specific measures to protect itself, in whole or in part, against the consequences of the risk. Such measures are often referred to as "risk mitigation". In the previous example, the project company will carefully review the reliability of the equipment suppliers and the technology proposed. The project company may require its equipment suppliers to provide independent guarantees concerning the performance of their equipment. The supplier may also be liable to pay penalties or liquidated damages to the project company for the consequences of failure of its equipment. In some cases, a more or less complex chain

of contractual arrangements may be made to mitigate the consequences of a project risk. For instance, the project company may combine the guarantees provided by the equipment supplier with commercial insurance covering some consequences of the interruption of its business as a result of equipment failure.

1. Overview of main categories of project risk

11. For purposes of illustration, the following paragraphs provide an overview of the main categories of project risk and give examples of certain contractual arrangements used for risk allocation and mitigation. For further discussion on this subject, the reader is advised to consult other sources of information, such as the *UNIDO BOT Guidelines*.[1]

(a) Project disruption caused by events outside the control of the parties

12. The parties face the risk that the project may be disrupted by unforeseen or extraordinary events outside their control, which may be of a physical nature, such as natural disasters—floods, storms or earthquakes—, or the result of human action, such as war, riots or terrorist attacks. Such unforeseen or extraordinary events may cause a temporary interruption of the project execution or the operation of the facility, resulting in construction delay, loss of revenue and other losses. Severe events may cause physical damage to the facility or even destruction beyond repair (for a discussion of the legal consequences of the occurrence of such events, see chap. IV, "Construction and operation of infrastructure", paras. 131-139).

(b) Project disruption caused by adverse acts of Government ("political risk")

13. The project company and the lenders face the risk that the project execution may be negatively affected by acts of the contracting authority, another agency of the Government or the host country's legislature. Such risks are often referred to as "political risks" and may be divided into three broad categories: "traditional" political risks (for example, nationalization of the project company's assets or imposition of new taxes that jeopardize the project company's prospects of debt repayment and investment recovery); regulatory risks (for example, introduction of more stringent standards for service delivery or opening of a sector to competition) and "quasi-commercial" risks (for example, breaches by the contracting authority or project interruptions due to changes in the contracting authority's priorities and plans) (for a discussion of the legal consequences of the occurrence of such events, see chap. IV, "Construction and operation of infrastructure", paras. 122-125). In addition to political risks originating from the host country, some political risks may result from acts of a foreign Government, such as blockades, embargoes or boycotts imposed by the Governments of the investors' home countries.

(c) Construction and operation risks

14. The main risks that the parties may face during the construction phase are the risks that the facility cannot be completed at all or cannot be delivered according to the agreed schedule (completion risk); that the construction cost exceeds the original estimates (construction cost overrun risk); or that the facility fails to meet performance criteria at completion (performance risk). Similarly, during the operational phase the parties may face the risk that the completed facility cannot be effectively operated or maintained to produce the expected capacity, output or efficiency (performance risk); or that the operating costs exceed the original estimates (operation cost overrun). It should be noted that construction and operation risks do not affect only the private sector. The contracting authority and the users in the host country may be severely affected by an interruption in the provision of needed services. The Government, as

representative of the public interest, will be generally concerned about safety risks or environmental damage caused by improper operation of the facility.

15. Some of these risks may be brought about by the project company or its contractors or suppliers. For instance, construction cost overrun and delay in completion may be the result of inefficient construction practices, waste, insufficient budgeting or lack of coordination among contractors. Failure of the facility to meet performance criteria may also be the result of defective design, inadequacy of the technology used or faulty equipment delivered by the project company's suppliers. During the operational phase, performance failures may be the consequence, for example, of faulty maintenance of the facility or negligent operation of mechanical equipment. Operation cost overruns may also derive from inadequate management.

16. However, some of these risks may also result from specific actions taken by the contracting authority, by other public authorities or even the host country's legislature. Performance failures or cost overruns may be the consequence of the inadequacy of the technical specifications provided by the contracting authority during the selection of the concessionaire. Delays and cost overruns may also be brought about by actions of the contracting authority subsequent to the award of the project (delays in obtaining approvals and permits, additional costs caused by changes in requirements due to inadequate planning, interruptions caused by inspecting agencies or delays in delivering the land on which the facility is to be built). General legislative or regulatory measures, such as more stringent safety or labour standards, may also result in higher construction or operating costs. Shortfalls in production may be caused by the non-delivery of the necessary supplies (for example, power or gas) on the part of public authorities.

(d) Commercial risks

17. "Commercial risks" relate to the possibility that the project cannot generate the expected revenue because of changes in market prices or demand for the goods or services it generates. Both of these forms of commercial risk may seriously impair the project company's capacity to service its debt and may compromise the financial viability of the project.

18. Commercial risks vary greatly according to the sector and type of project. The risk may be regarded as minimal or moderate where the project company has a monopoly over the service concerned or when it supplies a single client through a standing off-take agreement. However, commercial risks may be considerable in projects that depend on market-based revenues, in particular where the existence of alternative facilities or supply sources makes it difficult to establish a reliable forecast of usage or demand. This may be a serious concern, for instance, in tollroad projects, since tollroads face competition from toll-free roads. Depending on the ease with which drivers may have access to toll-free roads, the toll revenues may be difficult to forecast, especially in urban areas where there may be many alternative routes and roads may be built or improved continuously. Furthermore, traffic usage has been found to be even more difficult to forecast in the case of new tollroads, especially those which are not an addition to an existing toll facility system, because there is no existing traffic to use as an actuarial basis.

(e) Exchange rate and other financial risks

19. Exchange rate risk relates to the possibility that changes in foreign exchange rates alter the exchange value of cash flows from the project. Prices and user fees charged to local users or customers will most likely be paid for in local currency, while the loan facilities and sometimes also equipment or fuel costs may be denominated in foreign currency. This risk may be considerable, since exchange rates are particularly unstable in many developing countries or countries whose economies are in transition. In addition to exchange rate fluctuations, the

project company may face the risk that foreign exchange control or lowering reserves of foreign exchange may limit the availability in the local market of foreign currency needed by the project company to service its debt or repay the original investment.

20. Another risk faced by the project company concerns the possibility that interest rates may rise, forcing the project to bear additional financing costs. This risk may be significant in infrastructure projects given the usually large sums borrowed and the long duration of the project, with some loans extending over a period of several years. Loans are often given at a fixed rate of interest (for example, fixed-rate bonds) to reduce the interest rate risk. In addition, the finance package may include hedging facilities against interest rate risks, for example, by way of interest rate swaps or interest rate caps.

2. Contractual arrangements for risk allocation and mitigation

21. It follows from the above that the parties need to take into account a wide range of factors to allocate project risks effectively. For this reason, it is generally not advisable to have in place statutory provisions that limit unnecessarily the negotiators' ability to achieve a balanced allocation of project risks, as appropriate to the needs of individual projects. Nevertheless, it may be useful for the Government to provide some general guidance to officials acting on behalf of domestic contracting authorities, for instance, by formulating advisory principles on risk allocation.

22. Practical guidance provided to contracting authorities in a number of countries often refers to general principles for the allocation of project risks. One such principle is that specific risks should normally be allocated to the party best able to assess, control and manage the risk. Additional guiding principles envisage the allocation of project risks to the party with the best access to hedging instruments (that is, investment schemes to offset losses in one transaction by realizing a simultaneous gain on another) or the greatest ability to diversify the risks or to mitigate them at the lowest cost. In practice, however, risk allocation is often a factor of both policy considerations (for example, the public interest in the project or the overall exposure of the contracting authority under various projects) and the negotiating strength of the parties. Furthermore, in allocating project risks it is important to consider the financial strength of the parties to which a specific risk is allocated and their ability to bear the consequences of the risk, should it occur.

23. It is usually for the project company and its contractors to assume ordinary risks related to the development and operation of the infrastructure. For instance, completion, cost overrun and other risks typical of the construction phase are usually allocated to the construction contractor or contractors through a turnkey construction contract, whereby the contractor assumes full responsibility for the design and construction of the facility at a fixed price, within a specified completion date and according to particular performance specifications (see chap. IV, "Construction and operation of infrastructure", para. 70). The construction contractor is typically liable to pay liquidated damages or penalties for any late completion. In addition, the contractor is also usually required to provide a guarantee of performance, such as a bank guarantee or a surety bond. Separate equipment suppliers are also usually required to provide guarantees in respect of the performance of their equipment. Guarantees of performance provided by contractors and equipment suppliers are often complemented by similar guarantees provided by the concessionaire to the benefit of the contracting authority. Similarly, the project company typically mitigates its exposure to operation risks by entering into an operation and maintenance contract in which the operating company undertakes to achieve the required output and assumes the liability for the consequences of operational failures. In most cases, arrangements of this type will be an essential requirement for a successful project. The lenders, for their part, will seek protection against the consequences of those risks, by requiring the

assignment of the proceeds of any bonds issued to guarantee the contractor's performance, for instance. Loan agreements typically require that the proceeds from contract bonds be deposited in an account pledged to the lenders (that is, an "escrow account"), as a safeguard against misappropriation by the project company or against seizure by third parties (for example, other creditors). Nevertheless, the funds paid under the bonds are regularly released to the project company as needed to cover repair costs or operating and other expenses.

24. The contracting authority, on the other hand, will be expected to assume those risks which relate to events attributable to its own actions, such as inadequacy of technical specifications provided during the selection process or delay caused by failure to provide agreed supplies on time. The contracting authority may also be expected to bear the consequences of disruptions caused by acts of Government, for instance by agreeing to compensate the project company for loss of revenue due to price control measures (see chap. IV, "Construction and operation of infrastructure", para. 124). While some political risks may be mitigated by procuring insurance, such insurance, if at all available for projects in the country concerned, may not be obtainable at an acceptable cost. Thus, prospective investors and lenders may turn to the Government, for instance, to obtain assurances against expropriation or nationalization and guarantees that proper compensation will be payable in the event of such action (see para. 50). Depending on their assessment of the level of risk faced in the host country, prospective investors and lenders may not be ready to pursue a project in the absence of those assurances or guarantees.

25. Most of the project risks referred to in the preceding paragraphs can, to a greater or lesser extent, be regarded as falling within the control of one party or the other. However, a wide variety of project risks result from events outside the control of the parties or are attributable to the acts of third parties and other principles of risk allocation may thus need to be considered.

26. For example, the project company could expect that the interest rate risk, together with the inflation risk, would be passed on to the end-users or customers of the facility through price increases, although this may not always be possible because of market-related circumstances or price control measures. The price structure negotiated between the project company and the contracting authority will determine the extent to which the project company will avoid those risks or whether it will be expected to absorb some of them (see chap. IV, "Construction and operation of infrastructure", paras. 36-46).

27. Another category of risk that may be allocated under varying schemes concerns extraneous events such as war, civil disturbance, natural disasters or other events wholly outside the control of the parties. In traditional infrastructure projects carried out by the public sector, the public entity concerned usually bears the risk, for example, of destruction of the facility by natural disasters or similar events, to the extent that those risks may not be insurable. In privately financed infrastructure projects the Government may prefer this type of risk to be borne by the project company. However, depending on their assessment of the particular risks faced in the host country, the private sector may not be ready to bear those risks. Therefore, in practice there is not a single solution to cover this entire category of risk and special arrangements are often made to deal with each of them. For example, the parties may agree that the occurrence of some of those events may exempt the affected party from the consequences of failure to perform under the project agreement and there will be contractual arrangements providing solutions for some of their adverse consequences, such as contract extensions to compensate for delay resulting from events or even some form of direct payment under special circumstances (see chap. IV, "Construction and operation of infrastructure", paras. 131-139). Those arrangements will be supplemented by commercial insurance purchased by the project

company, where available at an acceptable cost (see chap. IV, "Construction and operation of infrastructure", paras. 119 and 120).

28. Special arrangements may also need to be negotiated for the allocation of commercial risks. Projects such as mobile telecommunication projects usually have a relatively high direct cost recovery potential and in most cases the project company is expected to carry out the project without sharing those risks with the contracting authority and without recourse to support from the Government. In other infrastructure projects, such as power- generation projects, the project company may revert to contractual arrangements with the contracting authority or other public authority in order to reduce its exposure to commercial risks, for example, by negotiating long-term off-take agreements that guarantee a market for the product at an agreed price. Payments may take the form of actual consumption or availability charges or combine elements of both; the applicable rates are usually subject to escalation or indexation clauses in order to protect the real value of revenues from the increased costs of operating an ageing facility (see also chap. IV, "Construction and operation of infrastructure", paras. 50 and 51). Lastly, there are relatively capital-intensive projects with more slowly developing cost recovery potential, such as water supply and some tollroad projects, which the private sector may be reluctant to carry out without some form of risk-sharing with the contracting authority, forexample, through fixed revenue assurances or agreed capacity payments regardless of actual usage (see also chap. IV, "Construction and operation of infrastructure", paras. 48 and 49).

29. The risk allocation eventually agreed to by the contracting authority and the project company will be reflected in their mutual rights and obligations, as set forth in the project agreement. The possible legislative implications of certain provisions commonly found in project agreements are discussed in other chapters of the *Guide* (see chaps. IV, "Construction and operation of infrastructure", and V, "Duration, extension and termination of the project agreement"). Various other agreements will also be negotiated by the parties to mitigate or reallocate the risks they assume (for example, loan agreements; construction, equipment supply, operation and maintenance contracts; direct agreement between the contracting authority and the lenders; and off-take and long-term supply agreements, where applicable).

C. Government support

30. The discussion in the preceding section shows that the parties may use various contractual arrangements to allocate and mitigate project risks. Nevertheless, those arrangements may not always be sufficient to ensure the level of comfort required by private investors to participate in privately financed infrastructure projects. It may also be found that certain additional government support is needed to enhance the attractiveness of private investment in infrastructure projects in the host country.

31. Government support may take various forms. Generally, any measure taken by the Government to enhance the investment climate for infrastructure projects may be regarded as governmental support. From that perspective, the existence of legislation enabling the Government to award privately financed infrastructure projects or the establishment of clear lines of authority for the negotiation and follow-up of infrastructure projects (see chap. I, "General legislative and institutional framework", paras. 23-29) may represent important measures to support the execution of infrastructure projects. As used in the *Guide*, however, the expression "government support" has a narrower connotation and refers in particular to special measures, in most cases of a financial or economic nature, that may be taken by the Government to enhance the conditions for the execution of a given project or to assist the project company in meeting some of the project risks, above and beyond the ordinary scope

of the contractual arrangements agreed to between the contracting authority and the project company to allocate project risks. Government support measures, where available, are typically an integral part of governmental programmes to attract private investment for infrastructure projects.

1. Policy considerations relating to government support

32. In practice, a decision to support the implementation of a project is based on an assessment by the Government of the economic or social value of the project and whether that justifies additional governmental support. The Government may estimate that the private sector alone may not be able to finance certain projects at an acceptable cost. The Government may also consider that particular projects may not materialize without certain support measures that mitigate some of the project risks. Indeed, the readiness of private investors and lenders to carry out large projects in a given country is not only based on their assessment of specific project risks, but is also influenced by their comfort with the investment climate in the host country, in particular in the infrastructure sector. Factors to which private investors may attach special importance include the host country's economic system and the degree of development of market structures and the degree to which the country has already succeeded with privately financed infrastructure projects over a period of years.

33. For the above reasons, a number of countries have adopted a flexible approach for dealing with the issue of governmental support. In some countries, this has been done by legislative provisions that tailor the level and type of support to the specific needs of individual infrastructure sectors. In other countries, this has been achieved by providing the host Government with sufficient legislative authority to extend certain types of assurance or guarantee while preserving its discretion not to make them available in all cases. However, the host Government will be interested in ensuring that the level and type of support provided to the project does not result in the assumption of open-ended liabilities. Indeed, over-commitment of public authorities through guarantees given to a specific project may prevent them from extending guarantees in other projects of perhaps even greater public interest.

34. The efficiency of governmental support programmes for private investment in infrastructure may be enhanced by the introduction of appropriate techniques for budgeting for governmental support measures or for assessing the total cost of other forms of governmental support. For example, loan guarantees provided by public authorities usually have a cost lower than the cost of loan guarantees provided by commercial lenders. The difference (less the value of fees and interests payable by the project company) represents a cost for the Government and a subsidy for the project company. However, loan guarantees are often not recorded as expenses until such time as a claim is made. Thus, the actual amount of the subsidy granted by the Government is not recorded, which may create the incorrect impression that loan guarantees entail a lesser liability than direct subsidy payments. Similarly, the financial and economic cost of tax exemptions granted by the Government may not be apparent, which makes them less transparent than other forms of direct governmental support. For these reasons, countries that are contemplating establishing support programmes for privately financed infrastructure projects may need to devise special methods for estimating the budgetary cost of support measures such as tax exemptions, loans and loan guarantees provided by public authorities that take into account the expected present value of future costs or loss of revenue.

2. Forms of government support

35. The availability of direct governmental support, be it in the form of financial guarantees, public loans or revenue assurances, may be an important element in the financial structuring of the project. The following paragraphs briefly describe forms of governmental support that are sometimes authorized under domestic laws and discuss possible legislative implications they may have for the host country, without advocating the use of any of them in particular.

36. Generally, besides the administrative and budgetary measures that may be needed to ensure the fulfilment of governmental commitments throughout the duration of the project, it is advisable for the legislature to consider the possible need for an explicit legislative authorization to provide certain forms of support. Where government support is found advisable, it is important for the legislature to bear in mind the host country's obligations under international agreements on regional economic integration or trade liberalization, which may limit the ability of public authorities of the contracting States to provide support, financial or otherwise, to companies operating in their territories. Furthermore, where a Government is contemplating support for the execution of an infrastructure project, that circumstance should be made clear to all prospective bidders at an appropriate time during the selection proceedings (see chap. III, "Selection of the concessionaire", para. 67).

(a) Public loans and loan guarantees

37. In some cases, the law authorizes the Government to extend interest-free or low-interest loans to the project company to lower the project's financing cost. Depending on the accounting rules to be followed, some interest-free loans provided by public agencies can be recorded as revenue in the project company's accounts, with loan payments being treated as deductible costs for tax and accounting purposes. Moreover, subordinate loans provided by the Government may enhance the financial terms of the project by supplementing senior loans provided by commercial banks without competing with senior loans for repayment. Governmental loans may be generally available to all project companies in a given sector or they may be limited to providing temporary assistance to the project company in the event that certain project risks materialize. The total amount of any such loan may be further limited to a fixed sum or to a percentage of the total project cost.

38. In addition to public loans, some national laws authorize the contracting authority or other agency of the host Government to provide loan guarantees for the repayment of loans taken by the project company. Loan guarantees are intended to protect the lenders (and, in some cases, investors providing funds to the project as well) against default by the project company. Loan guarantees do not entail an immediate disbursement of public funds and they may appear more attractive to the Government than direct loans. However, loan guarantees may represent a substantial contingent liability and the Government's exposure may be significant, especially in the event of total failure by the project company. Indeed, the Government would in most cases find little comfort in a possible subrogation in the rights of the lenders against an insolvent project company.

39. Thus, in addition to introducing general measures to enhance the efficiency of governmental support programmes (see para. 34), it may be advisable to consider concrete provisions to limit the Government's exposure under loan guarantees. Rules governing the provision of loan guarantees may provide a maximum ceiling, which could be expressed as a fixed sum or, if more flexibility is needed, a certain percentage of the total investment in any given project. Another measure to circumscribe the contingent liabilities of the guaranteeing agency may be to define the circumstances under which such guarantees may be extended, taking into account the types of project risk the Government may be ready to share. For instance, if the Government considers sharing only the risks of temporary disruption caused by events outside the control of the parties, the guarantees could be limited to the event that

the project company is rendered temporarily unable to service its loans owing to the occurrence of specially designated unforeseeable events outside the project company's control. If the Government wishes to extend a greater degree of protection to the lenders, the guarantees may cover the project company's permanent failure to repay its loans for the same reasons. In such a case, however, it is advisable not to remove the incentives for the lenders to arrange for the continuation of the project, for instance by identifying another suitable concessionaire or by stepping in through an agent appointed to remedy the project company's default (see chap. IV, "Construction and operation of infrastructure", paras. 147-150). The call on the governmental guarantees could thus be conditional upon the prior exhaustion of other remedies available to the lenders under the project agreement, the loan agreements or their direct agreements with the contracting authority, if any. In any event, full loan guarantees by the Government amounting to a total protection of the lenders against the risk of default by the project company are not a common feature of infrastructure projects carried out under the project finance modality.

(b) Equity participation

40. Another form of additional support by the Government may consist of direct or indirect equity participation in the project company. Equity participation by the Government may help achieve a more favourable ratio between equity and debt by supplementing the equity provided by the project sponsors, in particular where other sources of equity capital, such as investment funds, cannot be tapped by the project company. Equity investment by the Government may also be useful to satisfy legal requirements of the host country concerning the composition of locally established companies. The company laws of some jurisdictions, or special legislation on infrastructure projects, require a certain amount of participation of local investors in locally established companies. However, it may not always be possible to secure the required level of local participation on acceptable terms. Local investors may lack the interest or financial resources to invest in large infrastructure projects; they may also be averse to or lack experience in dealing with specific project risks.

41. Governmental participation may involve certain risks that the Government may wish to consider. In particular, there is a risk that such participation may be understood as an implied guarantee by the Government, so that the parties, or even third parties, may expect the Government to back the project fully or eventually even take it over at its own cost if the project company fails. Where such an implied guarantee is not intended, appropriate provisions should be made to clarify the limits of governmental involvement in the project.

(c) Subsidies

42. Tariff subsidies are used in some countries to supplement the project company's revenue when the actual income of the project falls below a certain minimum level. The provision of the services in some areas where the project company is required to operate may not be a profitable undertaking, because of low demand or high operational costs or because the project company is required to provide the service to a certain segment of the population at low cost. Thus, the law in some countries authorizes the Government to undertake to extend subsidies to the project company in order to make it possible to provide the services at a lower price.

43. Subsidies usually take the form of direct payments to the project company, either lump-sum payments or payments calculated specifically to supplement the project company's revenue. In the latter case, the Government should ensure that it has in place adequate mechanisms for verifying the accuracy of subsidy payments made to the project company, by means, for example, of audit and financial disclosure provisions in the project agreement. An alternative to direct subsidies may be to allow the project company to cross-subsidize less

profitable activities with revenue earned in more profitable ones. This may be done by combining in the same concession both profitable and less profitable activities or areas of operation, or by granting to the project company the commercial exploitation of a separate and more profitable ancillary activity (see paras. 48-60).

44. However, it is important for the legislature to consider practical implications and possible legal obstacles to the provision of subsidies to the project company. For example, subsidies are found to distort free competition and the competition laws of many countries prohibit the provision of subsidies or other forms of direct financial aid that are not expressly authorized by legislation. Subsidies may also be inconsistent with the host country's international obligations under international agreements on regional economic integration or trade liberalization.

(d) Sovereign guarantees

45. In connection with privately financed infrastructure projects, the term "sovereign guarantees" is sometimes used to refer to any of two types of guarantee provided by the host Government. The first type includes guarantees issued by the host Government to cover the breach of obligations assumed by the contracting authority under the project agreement. A second category includes guarantees that the project company will not be prevented by the Government from exercising certain rights that are granted to it under the project agreement or that derive from the laws of the country, for example, the right to repatriate profits at the end of the project. Whatever form such guarantees may take, it is important for the Government and the legislature to consider the Government's ability to assess and manage efficiently its own exposure to project risks and to determine the acceptable level of direct or contingent liabilities it can assume.

(i) Guarantees of performance by the contracting authority

46. Performance guarantees may be used where the contracting authority is a separate or autonomous legal entity that does not engage the responsibility of the Government itself. Such guarantees may be issued in the name of the Government or of a public financial institution of the host country. They may also take the form of a guarantee issued by international financial institutions that are backed by a counter-guarantee by the Government (see paras. 61-71). Guarantees given by the Government may be useful instruments to protect the project company from the consequences of default by the contracting authority or other public authority assuming specific obligations under the project agreement. The most common situations in which such guarantees are used include the following:

(a) *Off-take guarantees*. Under these arrangements, the Government guarantees payment of goods and services supplied by the project company to public entities. Payment guarantees are often used in connection with payment obligations under off-take agreements in the power-generation sector (see chap. IV, "Construction and operation of infrastructure", para. 50). Such guarantees may be of particular importance where the main or sole customer of the project company is a government monopoly. Additional comfort is provided to the project company and lenders when the guarantee is subscribed by an international financial institution;

(b) *Supply guarantees*. Supply guarantees may also be provided to protect the project company from the consequences of default by public sector entities providing goods and supplies required for the operation of the facility—fuel, electricity or water, for example—or to secure payment of indemnities for which the contracting entity may become liable under the supply agreement;

(c) *General guarantees*. These are guarantees intended to protect the project company against any form of default by the contracting authority, rather than default on specifically

designated obligations. Although general performance guarantees may not be very frequent, there are cases in which the project company and the lenders may regard them as a condition necessary for executing the project. This may be the case, for example, where the obligations undertaken by the contracting authority are not commensurate with its creditworthiness, as may happen in connection with large concessions granted by municipalities or other autonomous entities. Guarantees by the Government may be useful to ensure specific performance, for example, when the host Government undertakes to substitute for the contracting entity in the performance of certain acts (for example, delivery of an appropriate site for disposal of by-products).

47. Generally, it is important not to overestimate the adequacy of sovereign guarantees alone to protect the project company against the consequences of default by the contracting authority. Except when their purpose is to ensure specific performance, sovereign guarantees usually have a compensatory function. Thus, they may not substitute for appropriate contractual remedies in the event of default by the contracting authority (see chap. IV, "Construction and operation of infrastructure", paras. 140-150). Different types of contractual remedies, or combinations thereof, may be used to deal with various events of default, for example, liquidated damages in the event of default and price increases or contract extensions in the event of additional delay in project execution caused by acts of the contracting authority. Furthermore, in order to limit the Government's exposure and to reduce the risk of calls on the guarantee, it is advisable to consider measures to encourage the contracting authority to live up to its obligations under the project agreement or to make efforts to control the causes of default. Such measures may include express subrogation rights of the guarantor against the contracting authority or internal control mechanisms to ensure the accountability of the contracting authority or its agents in the event, for instance, of wanton or reckless breach of its obligations under the project agreement resulting in a call on the sovereign guarantee.

(ii) Guarantees against adverse acts of Government

48. Unlike performance guarantees, which protect the project company against the consequences of default by the contracting authority, the guarantees considered here relate to acts of other authorities of the host country that are detrimental to the rights of the project company or otherwise substantially affect the implementation of the project agreement. Such guarantees are often referred to as "political risk guarantees".

49. One type of guarantee contemplated in national laws consists of foreign exchange guarantees, which usually fulfil three functions: to guarantee the convertibility of the local earnings into foreign currency, to guarantee the availability of the required foreign currency and to guarantee the transferability abroad of the converted sums. Foreign exchange guarantees are common in privately financed infrastructure projects involving a substantial amount of debt denominated in currencies other than the local currency, in particular in those countries which do not have freely convertible currencies. Some laws also provide that such a guarantee may be backed by a bank guarantee issued in favour of the project company. A foreign exchange guarantee is not normally intended to protect the project company and the lenders against the risks of exchange rate fluctuation or market-induced devaluation, which are considered to be ordinary commercial risks. However, in practice, Governments have sometimes agreed to assist the project company in cases where the project company is unable to repay its debts in foreign currency owing to extreme devaluation of the local currency.

50. Another important type of guarantee may be to assure the company and its shareholders that they will not be expropriated without adequate compensation. Such a guarantee would typically extend both to confiscation of property owned by the project company in the host country and to the nationalization of the project company itself, that is, confiscation of shares

of the project company's capital. This type of guarantee is usually provided for in laws dealing with direct foreign investment and in bilateral investment protection treaties (see chap. VII, "Other relevant areas of law", ___).

(e) Tax and customs benefits

51. Another method for the host Government to support the execution of privately financed projects could be to grant some form of tax and customs exemption, reduction or benefit. Domestic legislation on foreign direct investment often provides special tax regimes to encourage foreign investment and in some countries it has been found useful expressly to extend such a taxation regime to foreign companies participating in privately financed infrastructure projects (see also chap. VII, "Other relevant areas of law", __).

52. Typical tax exemptions or benefits include exemption from income or profit tax or from property tax on the facility, or exemptions from income tax on interest due on loans and other financial obligations assumed by the project company. Some laws provide that all transactions related to a privately financed infrastructure project will be exempted from stamp duties or similar charges. In some cases, the law establishes some preferential tax treatment or provides that the project company will benefit from the same favourable tax treatment generally given to foreign investments. Sometimes the tax benefit takes the form of a more favourable income tax rate, combined with a decreasing level of exemption during the initial years of the project. Such exemptions and benefits are sometimes extended to the contractors engaged by the project company, in particular foreign contractors.

53. Further taxation measures sometimes used to promote privately financed infrastructure projects are exemptions from withholding tax to foreign lenders providing loans to the project. Under many legal systems, any interest, commission or fee in connection with a loan or indebtedness that is borne directly or indirectly by locally established companies or is deductible against income earned locally is deemed to be local income for taxation purposes. Therefore, both local and foreign lenders to infrastructure projects may be liable to the payment of income tax in the host country, which the project company may be required to withhold from payments to foreign lenders, as non-residents of the host country. Income tax due by the lenders in the host country is typically taken into account in the negotiations between the project company and the lenders and may result in a higher financial cost for the project. In some countries, the competent organs are authorized to grant exemptions from withholding tax in connection with payments to non-residents that are found to be made for a purpose that promotes or enhances the economic or technological development of the host country or are otherwise deemed to be related to a purpose of public relevance.

54. Besides tax benefits or exemptions, national laws sometimes facilitate the import of equipment for the use of the project company by means of exemption from customs duties. Such exemption typically applies to the payment of import duties on equipment, machinery, accessories, raw materials and materials imported into the country for purposes of conducting preliminary studies, designing, constructing and operating infrastructure projects. In the event that the project company wishes to transfer or sell the imported equipment on the domestic market, the approval of the contracting authority usually needs to be obtained and the relevant import duties, turnover tax or other taxes need to be paid in accordance with the laws of the country. Sometimes the law authorizes the Government either to grant an exemption from customs duty or to guarantee that the level of duty will not be raised to the detriment of the project.

(f) Protection from competition

55. An additional form of governmental support may consist of assurances that no competing infrastructure project will be developed for a certain period or that no agency of the Government will compete with the project company, directly or through another concessionaire. Assurances of this sort serve as a guarantee that the exclusivity rights that may be granted to the concessionaire (see chap. I, "General legislative and institutional framework", paras. 20-22) will not be nullified during the life of the project. Protection from competition may be regarded by the project company and the lenders as an essential condition for participating in the development of infrastructure in the host country. Some national laws contain provisions whereby the Government undertakes not to facilitate or support the execution of a parallel project that might generate competition to the project company. In some cases, the law contains an undertaking by the Government that it will not alter the terms of such exclusivity to the detriment of the project company without the project company's consent.

56. Provisions of this type may be intended to foster the confidence of the project sponsors and the lenders that the basic assumptions under which the project was awarded will be respected. However, they may be inconsistent with the host country's international obligations under agreements on regional economic integration and trade liberalization. Furthermore, they may limit the ability of the Government to deal with an increase in the demand for the service concerned as the public interest may require or to ensure the availability of the services to various categories of user. It is therefore important to consider carefully the interests of the various parties involved. For instance, the required price level to allow profitable exploitation of a tollroad may exceed the paying capacity of low-income segments of the public. Thus, the contracting authority may have an interest in maintaining open to the public a toll-free road as an alternative to a new tollroad. At the same time, however, if the contracting authority decides to improve or upgrade the alternative road, the traffic flow may be diverted from the tollroad built by the project company, thus affecting its flow of income. Similarly, the Government may wish to introduce free competition for the provision of long-distance telephone services in order to expand the availability and reduce the cost of telecommunication services (for a brief overview of issues relating to competition, see "Introduction and background information on privately financed infrastructure projects", paras. 24-29). The consequence of such a measure, however, may be a significant erosion of the income anticipated by the project company.

57. Generally, it may be useful to authorize the Government, where appropriate, to give assurances that the project company's exclusive rights will not be unduly affected by subsequent changes in governmental policies without appropriate compensation. However, it may not be advisable to adopt statutory provisions that rule out the possibility of subsequent changes in the Government's policy for the sector concerned, including a decision to promote competition or to build parallel infrastructure. The possible consequences of such future changes for the project company should be dealt with by the parties in contractual provisions dealing with changes in circumstances (see chap. IV, "Construction and operation of infrastructure", paras. 121-130). It is particularly advisable to provide the contracting authority with the necessary power to negotiate with the project company the compensation that may be due for loss or damage that may result from a competing infrastructure project subsequently launched by the contracting authority or from any equivalent measure of the Government that adversely affects the project company's exclusive rights.

(g) Ancillary revenue sources

58. One additional form of support to the execution of privately financed infrastructure projects may be to allow the project company to diversify its investment through additional concessions for the provision of ancillary services or the exploitation of other activities. In

some cases, alternative sources of revenue may also be used as a subsidy to the project company for the purpose of pursuing a policy of low or controlled prices for the main service. Provided that the ancillary activities are sufficiently profitable, they may enhance the financial feasibility of a project: the right to collect tolls on an existing bridge, for example, may be an incentive for the execution of a new toll bridge project. However, the relative importance of ancillary revenue sources should not be overemphasized.

59. In order to allow the project company to pursue ancillary activities, it may be necessary for the Government to receive legislative authorization to grant the project company the right to use property belonging to the contracting authority for the purposes of such activities (for example, land adjacent to a highway for construction of service areas) or the right to charge fees for the use of a facility built by the contracting authority. Where it is felt necessary to control the development and possibly the expansion of such ancillary activities, the approval of the contracting authority might be required in order for the project company to undertake significant expansion of facilities used for ancillary activities.

60. Under some legal systems, certain types of ancillary source of revenue offered by the Government may be regarded as a concession separate from the main concession and it is therefore advisable to review possible limitations to the project company's freedom to enter into contracts for the operation of ancillary facilities (see chap. IV, "Construction and operation of infrastructure", paras. 100 and 101).

D. Guarantees provided by international financial institutions

61. Besides guarantees given directly by the host Government, there may be guarantees issued by international financial institutions, such as the World Bank, the Multilateral Investment Guarantee Agency and the regional development banks. Such guarantees usually protect the project company against certain political risks, but under some circumstances they may also cover breach of the project agreement, for instance, where the project company defaults on its loans as a result of the breach of an obligation by the contracting authority.

1. Guarantees provided by multilateral lending institutions

62. In addition to lending to Governments and public authorities, multilateral lending institutions, such as the World Bank and the regional development banks, have developed programmes to extend loans to the private sector. Sometimes they can also provide guarantees to commercial lenders for public and private sector projects. In most cases, such guarantees provided by those institutions require a counter-guarantee from the host Government.

63. Guarantees by multilateral lending institutions are designed to mitigate the risks of default on sovereign contractual obligations or long-maturity loans that private lenders are not prepared to bear and are not equipped to evaluate. For instance, guarantees provided by the World Bank may typically cover specified risks (the partial risk guarantee) or all credit risks during a specified part of the financing term (the partial credit guarantee), as summarized below. Most regional development banks provide guarantees under terms similar to those of the World Bank.

(a) Partial risk guarantees

64. A partial risk guarantee covers specified risks arising from non-performance of sovereign contractual obligations or certain political *force majeure* events. Such guarantees ensure payment in the case of debt service default resulting from the non-performance of contractual

obligations undertaken by Governments or their agencies. They may cover various types of non-performance, such as failure to maintain the agreed regulatory framework, including price formulas; failure to deliver inputs, such as fuel supplied to a private power company; failure to pay for outputs, such as power purchased by a government utility from a power company or bulk water purchased by a local public distribution company; failure to compensate for project delays or interruptions caused by government actions or political events; procedural delays; and adverse changes in exchange control laws or regulations.

65. When multilateral lending institutions participate in financing a project, they sometimes provide support in the form of a waiver of recourse that they would otherwise have to the project company in the event that default is caused by events such as political risks. For example, a multilateral lending institution taking a completion guarantee from the project company may accept that it cannot enforce that guarantee if the reason for failure to complete was a political risk reason.

(b) Partial credit guarantees

66. Partial credit guarantees are provided to private sector borrowers with a government counter-guarantee. They are designed to cover the portion of financing that falls due beyond the normal tenure of loans provided by private lenders. These guarantees are generally used for projects involving private sector participation that need long-term funds to be financially viable. A partial credit guarantee typically extends maturities of loans and covers all events of non-payment for a designated part of the debt service.

2. Guarantees provided by the Multilateral Investment Guarantee Agency

67. The Multilateral Investment Guarantee Agency (MIGA) offers long-term political risk insurance coverage to new investments originating in any member country and destined for any developing member country other than the country from which the investment originates. New investment contributions associated with the expansion, modernization or financial restructuring of existing projects are also eligible, as are acquisitions that involve the privatization of state enterprises. Eligible forms of foreign investment include equity, shareholder loans and loan guarantees issued by equity holders, provided the loans and loan guarantees have terms of at least three years. Loans to unrelated borrowers can also be insured, as long as a shareholder investment in the project is concurrently insured. Other eligible forms of investment are technical assistance, management contracts and franchising and licensing agreements, provided they have terms of at least three years and the remuneration of the investor is tied to the operating results of the project. MIGA insures against the following risks: foreign currency transfer restrictions, expropriation, breach of contract, war and civil disturbance.

(a) Transfer restrictions

68. The purpose of guarantees of foreign currency transfer extended by MIGA is similar to that of sovereign foreign exchange guarantees that may be provided by the host Government (see para. 49). This guarantee protects against losses arising from an investor's inability to convert local currency (capital, interest, principal, profits, royalties and other remittances) into foreign exchange for transfer outside the host country. The coverage insures against excessive delays in acquiring foreign exchange caused by action or failure to act by the host Government, by adverse changes in exchange control laws or regulations and by deterioration in conditions governing the conversion and transfer of local currency. Currency devaluation is not covered.

On receipt of the blocked local currency from an investor, MIGA pays compensation in the currency of its contract of guarantee.

(b) Expropriation

69. This guarantee protects against loss of the insured investment as a result of acts by the host Government that may reduce or eliminate ownership of, control over or rights to the insured investment. In addition to outright nationalization and confiscation, "creeping" expropriation—a series of acts that, over time, have an expropriatory effect—is also covered. Coverage is provided on a limited basis for partial expropriation (for example, confiscation of funds or tangible assets). Bona fide, non-discriminatory measures taken by the host Government in the exercise of legitimate regulatory authority are not covered. For total expropriation of equity investments, MIGA pays the net book value of the insured investment. For expropriation of funds, MIGA pays the insured portion of the blocked funds. For loans and loan guarantees, the Agency insures the outstanding principal and any accrued and unpaid interest. Compensation is paid upon assignment of the investor's interest in the expropriated investment (for example, equity shares or interest in a loan agreement) to MIGA.

(c) Breach of contract

70. This guarantee protects against losses arising from the host Government's breach or repudiation of a contract with the investor. In the event of an alleged breach or repudiation, the investor must be able to invoke a dispute resolution mechanism (for example, arbitration) under the underlying contract and obtain an award for damages. If, after a specified period of time, the investor has not received payment or if the dispute resolution mechanism fails to function because of actions taken by the host Government, MIGA will pay compensation.

(d) War and civil disturbance

71. This guarantee protects against loss from damage to, or the destruction or disappearance of, tangible assets caused by politically motivated acts of war or civil disturbance in the host country, including revolution, insurrection, *coup d'état*, sabotage and terrorism. For equity investments, MIGA will pay the investor's share of the least of the book value of the assets, their replacement cost or the cost of repair of damaged assets. For loans and loan guarantees, MIGA will pay the insured portion of the principal and interest payments in default as a direct result of damage to the assets of the project caused by war and civil disturbance. War and civil disturbance coverage also extends to events that, for a period of one year, result in an interruption of project operations essential to overall financial viability. This type of business interruption is effective when the investment is considered a total loss; at that point, MIGA will pay the book value of the total insured equity investment.

E. Guarantees provided by export credit agencies and investment promotion agencies

72. Insurance against certain political, commercial and financial risks, as well as direct lending, may be obtained from export credit agencies and investment promotion agencies. Export credit agencies and investment promotion agencies have typically been established in a number of countries to assist in the export of goods or services originating from that country. Export credit agencies act on behalf of the Governments of the countries supplying goods and services for the project. Most export credit agencies are members of the International Union of Credit and Investment Insurers (Berne Union), whose main objectives include promoting international

cooperation and fostering a favourable investment climate; developing and maintaining sound principles of export credit insurance; and establishing and sustaining discipline in the terms of credit for international trade.

73. While the support available differs from country to country, export credit agencies typically offer two lines of coverage:

(a) *Export credit insurance*. In the context of the financing of privately financed infrastructure projects, the essential purpose of export credit insurance is to guarantee payment to the seller whenever a foreign buyer of exported goods or services is allowed to defer payment. Export credit insurance may take the form of "supplier credit" or "buyer credit" insurance arrangements. Under the supplier credit arrangements the exporter and the importer agree on commercial terms that call for deferred payment evidenced by negotiable instruments (for example, bills of exchange or promissory notes) issued by the buyer. Subject to proof of creditworthiness, the exporter obtains insurance from an export credit agency in its home country. Under the buyer credit modality, the buyer's payment obligation is financed by the exporter's bank, which in turn obtains insurance coverage from an export credit agency. Export credits are generally classified as short-term (repayment terms of usually under two years), medium-term (usually two to five years) and long-term (over five years). Official support by export credit agencies may take the form of "pure cover", by which is meant insurance or guarantees given to exporters or lending institutions without financing support. Official support may also be given in the form of "financing support", which is defined as including direct credits to the overseas buyer, refinancing and all forms of interest rate support;

(b) *Investment insurance*. Export credit agencies may offer insurance coverage either directly to a borrower or to the exporter for certain political and commercial risks. Typical political and commercial risks include war, insurrection or revolution; expropriation, nationalization or requisition of assets; non-conversion of currency; and lack of availability of foreign exchange. Investment insurance provided by export credit agencies typically protects the investors in a project company established overseas against the insured risks, but not the project company itself. Investment insurance cover tends to be extended to a wide range of political risks. Export credit agencies prepared to cover such risks will typically require sufficient information on the legal system of the host country.

74. The conditions under which export credit agencies of member countries of the Organisation for Economic Cooperation and Development (OECD) offer support to both supplier and buyer credit transactions have to be in accordance with the OECD Arrangement on Guidelines for Officially Supported Export Credits (also referred to as the "OECD consensus"). The main purpose of the Arrangement is to provide a suitable institutional framework to prevent unfair competition by means of official support for export credits. In order to avoid market-distorting subsidies, the Arrangement regulates the conditions of terms of insurances, guarantees or direct lending supported by Governments.

Note

[1] See "Introduction and background information on privately financed infrastructure projects", footnote 1.